THE GRAMMAR OF BISA

– a Synchronic Description of the Lebir Dialect

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by

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ABSTRACT

This thesis sets out a description of the Grammar of the Bisa language of West Africa, and particularly the Lebiri Dialect thereof. An introductory chapter (Chap. 1 p.12) describes the people and their background, and explains the research on which the thesis is based and the hierarchical mode in which the Grammar is presented. A section of this chapter (1.5, pp. 61 ff.) gives a sketch of the phonology as an explanation of the transcriptions used in the citation of Bisa examples. Chapters 2 to 7 present the main matter of the analysis, viz. the Syntax of Lebiri Bisa in a Syntagmatic presentation. The successive Ranks of the hierarchy set up are described in terms of their structures and functions in these chapters: Chapter 2 treats of the Higher Ranks, Chapter 3 of the Sentence, Chapter 4 of the Clause, Chapter 5 covers the Phrase, and Chapter 6 the Word, while Morpheme Rank is dealt with in Chapter 7. The eighth and final Chapter describes non-Morphemic features with syntactic significance and the Morphophonemic relations between Syntax and Phonology. The thesis concludes with Appendices presenting Texts in transcription with accompanying vocabulary, notes on Dialects and Ideophones and Exclamations, and finally with a Bibliography.

ACKNOWLEDGEMENTS

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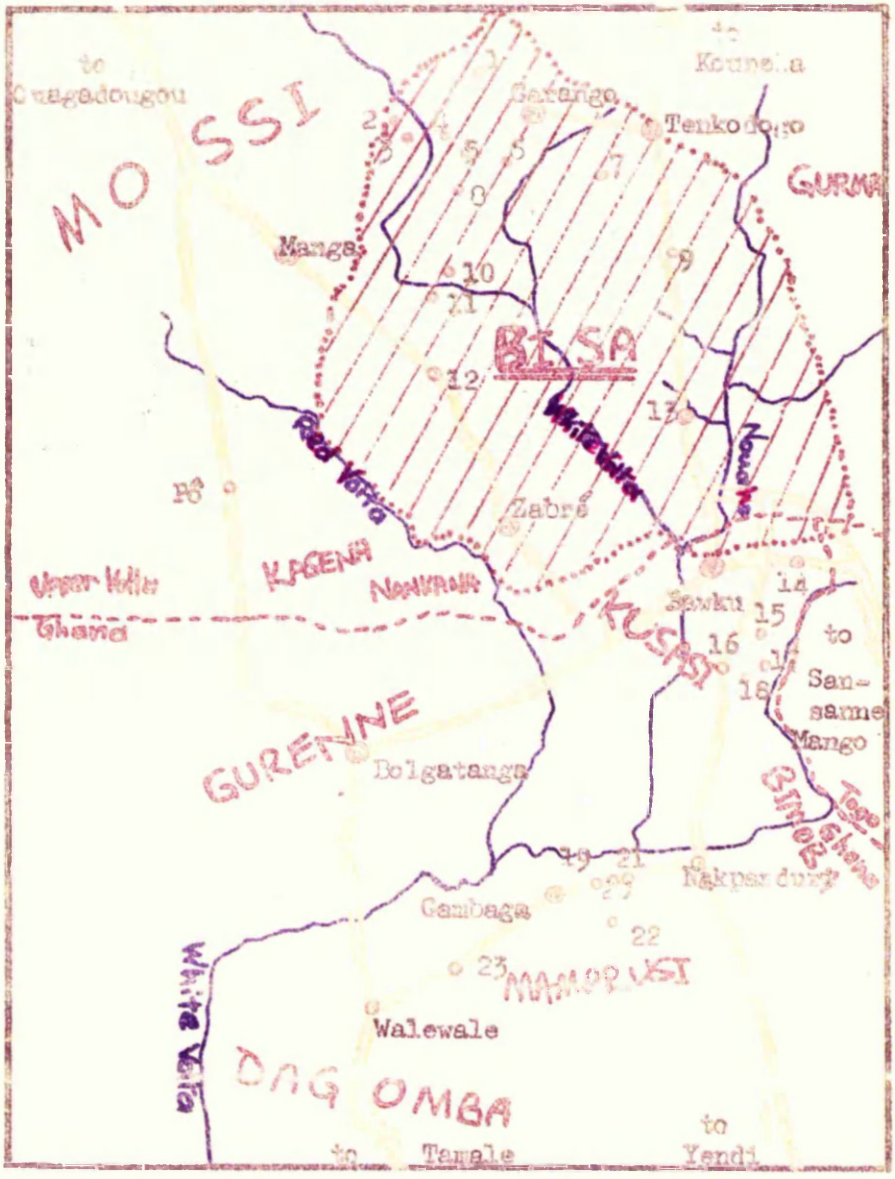
With regard to the period of time which I was able to spend in Africa on a field study of the Bisa language, I am again indebted to S.O.A.S. for a financial grant which supported the work, and also to the Irwin Fund of the University of London from which I received supplementary aid towards travel expenses. While in Ghana I benefited more than I can detail by the privilege of working as a Short Term Assistant of the Wycliffe Bible Translators and Institute of Linguistics - both by being able to make use of administrative and other facilities of the organisation, and also through the personal advice and friendship of individual members. I should also acknowledge my gratitude to many officials and private persons both in the University of Ghana and elsewhere whose friendly co-operation forwarded my work.

Above all, this study would not have been possible without the help of the people of Wuriyanga - notable Hamidu Musa, Mallam Iddrisu, and Kasim Musa; and of Kasim's relatives the Bandaogo family of Zigila Koupela in Upper Volta.

In processing the linguistic data I was aided by Dr. A C. Day and Mr. A. Shaw at the University College (London) Computer Centre.

Finally, thanks are due to the British School of the Summer Institute of Linguistics, and to St.Pauls' Church, London N.6. for help during the production of this thesis.



MAP to show the Bisa area
of Ghana and Upper Volta

(see Key : following page)

KEY to MAP (p.4)

Scale: 1,400,000: 1 (1 cm. - 14 km.)

The right-hand edge is roughly the Greenwich Meridian.

 - River

 - Main Road

 - Major Town

 - Town or Village

 - International boundary

 - Bisa 'homeland' territory

MOSSI - Major Language-group

Bisa towns and villages numbered as:

In Upper Volta:

1. Komtoéga
2. Belegho
3. Niagho
4. Ouaregou
5. Zigila
6. Sandogho
7. Loanga
8. Busim
9. Bané
10. Lenga
11. Yakala
12. Komboussougou
13. Bittou

In Ghana: (substantial Bisa 'colony')

14. Pusiga
15. Buguri
16. Garu
17. Wuriyanga
18. Tempane
19. Nalerigu
20. Namaasim
21. Sakogu
22. Nagbog
23. Langbinsi

(also: Bawku, Nakpanduri)

TABLE OF CONTENTS:

1 - INTRODUCTION

1.1 The Bisa People

The discussion in this section is based upon enquiries made during the author's visit to Ghana (January-October 1968) and to Upper Volta (November 1968), and upon the following works, detailed in the Bibliography, which may be consulted by those wanting information on the separate sources:-

Bernard (1966), (Ghana) - (1960), (Haute Volta Rep.) - (n.d.), (Maps), leMoal (1967), Frost (1944, 1950), Tauxier (1924).

1.1.1 The geographical location of the Bisa people may be fairly precisely delineated. They are found in the Republic of Upper Volta and in Ghana, between about latitudes of 10° and 12° North, and between the Red Volta river and the Greenwich Meridian (see map, page 4). This is country in the Sudan Savannah zone, with a rainfall of 20" - 30" almost entirely falling within the months of April to October.

The economy is exlusively that of peasant agriculture with a few rural handicrafts and a small number of entrepreneurs in the larger towns, who live by trading in and transporting farm produce. In the southern part of the area the land is very intensively farmed and the population density is one of the highest in rural Africa. In the northern area there is more wild

"bush" country - one of the major factors in the restriction of human habitation being the health hazard from onchocerciasis in the valleys of the Red and White Volta rivers and the Nouhao. The main produce of the area is grain - millet, guinea-corn, and maize which are mostly consumed locally, with rice as a cash crop; vegetable oils - groundnuts and sheanuts; vegetables in irrigated gardens; also poultry - mainly for home consumption - and animal husbandry - goats, sheep and cattle.

1.1.2. The region in which the Bisa are found is surrounded and overlapped by the territories of other tribes. The area outlined above is settled by the Bisa according to two different patterns. As far south as the Ghana-Upper Volta border to the East of the White Volta, and some miles north of the border in the West, the territory is regarded as "Bisa ko" - the Bisa homeland. The settlement in the South is what one might term "colonial" in the sense that there are Bisa "colonies" - villages with 40% or more Bisa population (numbered on map, p. 4) - scattered through an area where other villages might have a few or no members of this tribe. Most of these settlers remember their origins in the North and retain links with family members and traditional chiefs in that area. Wuriyanga, where my studies were largely conducted, is one such colony. In Upper Volta a Bisa will be known by a personal name, and a surname ("sol") marking his membership of one of a fairly limited number of extended-family groupings. In Ghana the pattern is for an individual to have a personal name followed by a gentilic - in this case "Busanga". If further precision is needed they usually add mention of the village in the North from which their family originated. The term "Busanga" - with plural "Busansi" - is widely used in official circles in Ghana (the French version in Upper Volta is "Boussancé"), and seems to derive from the Moré busaga - plural busasi - by the prenasalization of intervocalic consonant which is common in the area. The term

bisa - plural bisaŋɔ - is, however, the only one used by the people themselves to refer to members of the tribe or to their language and customs.

Linguistic evidence suggests that all the surrounding tribes are related to one another but not to the Bisa. In the North the tribal territory borders on that of the Mossi, and the two groups are mingled in the town of Tenkodogo and the village of Loanga. The eastern boundary of Bisa country in Upper Volta is the strip of unhealthy bush along the Nouhao river, beyond which are Gurma people. To the west of the Red Volta the Bisa have as neighbours the Nankana and Kasena, while immediately to the south are found the Kusasi, amongst whom villages like Wuriyanga form islands of the Bisa - while smaller colonies of Mossi, Bimoba (from the South and East) and other tribes are also found. Further south still (the Nakpanduri face of the Gambaga scarp forming the boundary) the Bisa live amongst the Mamprusi.

1.1.3 The culture of the whole region is fairly uniform across tribal boundaries. Settlements are scattered, with only a small proportion of the houses clustered around the market-place which may be regarded as the 'village centre'. The market is on a three-day cycle throughout the area and is of great importance, both in the economic and the social life of the people. A "house" (par) is a compound, with a group of round mud "rooms" (ke) with conical thatched roofs (a few modern rooms- rectangular with corrugated metal roof - are now to be seen), the outer ring linked by a shoulder-high wall with one entrance; the internal courtyard (geer) is divided into small units (gingeer) by other walls, (these internal walls become fewer and lower as one travels southwards, until in the area around Tamale the Dagombas have an open, unobstructed courtyard).

Farming is of the traditional pattern for Africa with a short hoe the

main tool. Cultivation takes place in a period of intensive work during the rainy season. Some gardens are irrigated by hand (with buckets) during the dry season. Tools are mainly of local manufacture, the caste of blacksmiths being the nearest to a specialist group in the society - although along with butchers, weavers, potters and others they also practise farming. There are no specialists of religion or folk-medicine and few crafts are practised - mainly the weaving of baskets and mats, house-building and -thatching, and leather-work. More attention is paid to decoration of artefacts as one travels to the North where a shorter rainy- (i.e. farming-) season gives more time for artistic efforts.

The difference between the two sides of the political frontier between Ghana and Upper Volta is quite striking. Ghanaian Bisa share in the generally depressed and backward state of the northern part of the country, distant from the capital and lacking in educational and employment opportunities. In Upper Volta the Bisa are the nearest tribe to the capital city apart from the dominant Mossi, and there are a number of highly placed officials in Ouagadougou who originate from the tribe - although in some cases a Franco-Mossi language and culture seems to have largely ousted those of the Bisa origins. The other differences mostly stem from the contrasts of French and English culture and of the policies adopted by the two European powers towards the administration of their colonial territories in the days when they ruled in West Africa.

1.1.4 The political and religious situation is easily described. In the nineteenth century the area inhabited by the Bisa was under the suzerainty of the Mogho Naba - the Mossi chief of Ouagadougou - in the North, and of the Mamprusi Nayiri in the South. The Bisa had a fairly decentralized organisation of their own, with some allegiance to the chief (kir) of Garango in the N.E. and of Zabré in the S.W., and managed to maintain a fair measure of

independence. Garango and Zabré now each form the centre of an administrative 'cercle' in Upper Volta, while in Ghana the Bisa villages have voting rights along with the other tribes, mostly in the administrative districts of Bawku (Upper Region) and Gambaga (Northern). In both countries the central governments have established a network of police-posts, schools, and clinics staffed with policemen, teachers, and dispensers - amongst whose number are a fair proportion of Bisa in Upper Volta, but who in Ghana are mostly recruited from outside the area.

The predominant religious force which I encountered amongst the Bisa was Islam. There are scattered Christian groups, particularly at the Roman Catholic centres of Garango and Zabré, and in Ouagadougou. Most Bisa in Ghana are at least nominally Muslims, but traditional paganism is still quite widespread in Upper Volta. This is a fairly simple religion whose main festivals are usually an annual farm-feast at the end of the harvest, an occasional ancestor-celebration, and an elaborate set of funeral ceremonies celebrated both at the interment and some time later (the dry season following the death, or one or two years afterwards). There are no masks, possession, or religious specialists. There is also little in the way of 'rites de passage' apart from the funerals; birth and marriage pass with no great religious celebration, and there is no initiation ritual. Indeed, the Bimoba circumcision rites and similar ceremonies, although they resemble examples widespread in other parts of West Africa, were regarded as signs of utter degradation by Kusasi pagans and Muslim Bisa and Mossi alike at Wuriyanga.

1.2 The Bisa Language

Some mentions of the Bisa language may be found in:- Houis (1959, 1963), Koelle (1854), Lavergne de Tressan (1953), Manessy (1952), Prost (1948 1950, 1953), Welmers (1958), Westermann/Bryan (1952).

1.2.1 The Bisa language is clearly established as belonging to the Mandaic group. There is still controversy over the exact aligning of sub-groups. It may be hoped that the present study, along with others known to be under way in related languages, may furnish some information to assist these comparative enquiries. In any case the Bisa language is distinctly different from all its neighbours which are members of the Gur group, and in the case of Mampruli-Kusal-Moré are hardly distinguishable amongst themselves. Bisa is clearly closely similar to Samo spoken in N.W. Upper Volta, and is also related to the Busa or Boko of the town of Bussa on the Niger in Nigeria and the Cercle Nikki in Dahomey (see Prost - 1953, and for Busa Funcke - 1913). Prost's work of 1950 is a grammar of a different dialect from that considered in the main part of this thesis. His treatment is rather as a pedagogical grammar, points being elucidated in terms of categories of French grammar and vocabulary; in this study we seek to follow the 'descriptive' tradition which derives suitable categories from the observed structures of the language under description. Prost appends quite a full dictionary of some 6,000 items.

1.2.2 My survey of the dialects of Bisa in Upper Volta (Nov. 1968 - see Appendix 1) showed two major cleavages, which intersect. The division between Easterly and Westerly dialects was already known (Prost - 1950, 1953). This is marked by an isogloss bundle of features of grammar, phonology, and vocabulary. Prost studied the Eastern dialect as spoken at the political centre - Garango - and adopted the usage of some of its speakers of calling themselves '<u>Bisa</u>' in contrast with the Western group owing allegiance to Zabre - whom they termed '<u>Lebir</u>' (pl. '<u>Lebinno</u>'). However, the Lebir speakers themselves - on whose speech this study is based - consider Bisa to be the cover term for the whole tribe (outsiders also all recognise the unity) and regard 'Lebir' as the name of their sub-group. There seems to be no universally-used name for the Garango Bisa vis-a-vis the Lebinno; the most generally-

acceptable I could find being 'Baraka'. - which I will use below (with the abbreviation 'Bk.' as opposed to Lebir 'Lb.')

The other cleavage which I noted was one dividing the North from the South of the district. This has fewer coincident criteria in terms of types, but its major distinctive feature accounts for a large number of tokens in speech. This is the southern use of "-ma/ -na" as a verbal marker This feature is found associated with both Lb. and Bk. features in southern districts. Thus the clause "You-all are sleeping" comes out as:

	awo yi nyintiin ban	in the North-west,
	ara ti hunku ban	in the North-east,
	awo yi nyintiin bama	in the South-west,
and	ara ti hunku bama	in the South-east.

Most older men could understand the other dialects in addition to their own, but other members of the group could only do so if they had travelled, or if they lived near a geographical dialect-boundary or in a mixed community such as Bawku in Ghana where all the Bisa dialects may be heard. In any case to speak another dialect was more difficult; the chief of Sandogo - a village occupying a redoubt of Baraka dialect largely surrounded by Lebir- tried to record his welcome-address to me in the dialect which he knew I had studied, but soon dried up with "I can't say any more in Lebir."

1.3 The Data

1.3.1 The material for this thesis was largely derived from studies in the Bisa area in 1968. Some help was gained from the work available on the Baraka dialect notably in Prost (1950) - this also refers to Lebir in places; also from Edmonson (1963) which has data mainly from the S.E. dialect. I worked regularly with Hamidu (see acknowledgements), and had the opportunity of consulting Iddrisu and Kasim; in addition I spent a considerable amount of

time in conversation with numerous Bisa callers at my house during the nine months that I spent at Wuriyanga.

1.3.2. For three months the work was almost entirely concerned with elicitation - getting English sentences translated into Bisa. I was then able to spend a month studying this material in order to devise a phonemically-based transcription (see Chapter 1.5 below) and to formalize the basic syntactic patterns already recognizable. The remaining time was mostly devoted to the recording on tape, and transcription, of texts - original un-translated utterances produced by native-speakers of Bisa. It is on this corpus of texts - a selection of which is appended as Appendix B below, in a reading transcription (cf. 1.5.3.) - that the following analysis is based. Elicited material and an assortment of utterances written down as they occurred in day-to-day social intercourse give some depth to this material and enable me to say that the form of Bisa analysed is not a special, peculiar form of speech used only for teaching to foreigners. The reference system of the texts is that used for the computer (1.3.5. below) comprising a two-letter text-identification, followed by a three-digit number referring to the 75-character punched-cards - the texts being thus divided into equal but linguistically arbitrary portions.

1.3.3 Problems of special style or register are not very apparent in this material. Abercrombie (1965, p. 1ff.) raises an objection to the basing of analysis on an artificial "prose" style. However, the arguments for analysis of what is basically the native-speaker's slow repetition of narrative have some cogency. The main strength of this approach is that it is easier to formulate rules to determine the derivation of the forms of other styles from those of "prose" than vice versa. In this case there is in fact a certain amount of conversational material in the corpus in the "Riddle-stories" where the company hears the story and then discusses which of the actors "was best" or "tried

hardest". In the free conversations which were recorded but do not appear here, the main differences from the prose style are the morphophonemic adaptations of speed and informality, and the more-frequent breaking up of grammatical units by hesitation and repetition (further detail appears in 2.2.3 below)

1.3.4 Songs have been omitted from the corpus presented here. This is partly because of the special nature of the song form, but also because most of the songs known to my Lebir informants seemed to be in the Baraka dialect, including the songs in texts AS, AT and AU embedded in a Lebir narrative. Apart from songs, and leaving questions of speed and informality aside, differences of style as one passes from informal conversation (including bargaining), through informal narrative formal narrative and story-telling (including Riddle-stories), real riddles (Text BB), to formal addresses, is only analysable at the highest level. That is, the syntax of the Clause or even the Sentence is basically the same, and the various styles are only distinguished by the construction of whole paragraphs or utterances.

1.3.5 Machine Processing of Data

Some of the repetitive work in the processing of the Bisa material was carried out by computer. The texts were put on to punched-cards in a special transcription. (1.5.2 2, p. 71 below). The machine provided a count of the frequency and distribution of the characters - which provides an approximation to a phoneme-analysis. The computer also produced a Concordance in which every occurrence of every word is listed alphabetically with preceding and following context. The Concordance enables the usage of any overt marker to be investigated in the totality of its occurrences in the corpus of texts. Another counting job performed by the computer - though of less relevance to syntactic studies - was that of counting all occurrences of every word and listing them in order of frequency.

1.4 - The Model

1.4.1 - Syntagmatic Grammar

The theoretical model used in this thesis is based on the Syntagmatic approach pioneered by J.T. Bendor-Samuel - 1958, 1961. The model is also exemplified in Callow (1962), Stanford (1967) and Thomas (1969). Syntagmatic Grammar is a hierarchical model, agreeing in broadest principles with Pike's Tagmemic school (e.g. - for syntax - Longacre 1964a; general study Pike, 1967), Halliday's Systemic (Scale-and-Category) Grammar (Halliday 1961, 1967; Huddlestone 1965), and Lamb's Stratificational approach (Lamb, 1966b; Taber 1967).

In this model any piece of linguistic behaviour is analysable on three Levels, the Phonological, the Syntactic[1] and the Semantic. The whole of any piece of Data is analysable in terms of each of these Levels. The analysis of any Level is essentially autonomous. There may, however, be some inter-penetration of Levels as discussed in, for instance, Pike 1947a 1952. It is also possible to state correlations between the Levels in terms of the "realization" of an item[2] of one Level in terms of some other; this mainly concerns "morpho-phonemic" [3] relations between Syntax and Phonology and "morpho-semantic" relations

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1 'Grammatical' has been used for the middle level, but in view of the frequency of the use of this term in modern writing for the whole study of Language, or of a language, we will use "Syntactic". This level includes areas which earlier structuralist studies distinguished as 'Syntax' and 'Morphology'.

2 "Item" will be used to refer to any analytical isolate whose theoretical status (as "unit", "feature", etc.) it is not possible or necessary to specify at the current stage of discussion.

3 We will use an ordinary word in a technical sense here, referring to the phonological form which realizes a syntactic item as its "spelling".

between Syntax and Semantics. This latter set of relations may be studied in either direction - the semantic "interpretation" of an item may be determined given the full syntactic analysis (analogously to the approach of Chomsky (1965) and Lyons (1963)), or the "expression" of a semantic structure can be stated in terms of Syntactic forms (as in Stratificational Grammar where the Sememic Strata initiate the generative process). There are some cases where semantic items are directly realized by phonological items (or "purely phonological items have a semantic interpretation") but these are comparatively rare in language: if necessary "phono-semantic" relations may be described alongside the other inter-Level realizations.

The fact that "Semantics" is one Level does not imply that this is the sole locus of meaningfulness - each Level contributes meaning in its own mode (cf. Firth, 1951). Similarly the use of "Syntax" as a label does not imply that we follow Chomsky in locating all the structural aspect of language at this one Level. As the discussion below makes clear, each Level has its own characteristic structuring.

Within each Level a hierarchy of Ranks is set up, such that the Units of each Rank are the constituent Elements of the Units of the Rank above while being themselves analysed into Elements which are Units of the Rank below (but see 1.4.3.4. p. 46f. below). The potentiality of a given Unit to appear as a particular Element in another Unit is a Function of that Unit. Note that Function is thus defined in a formal way analogous to that of Chomsky, 1965, p.68f. - but that this basic definition has long been part of approaches within the structuralist tradition;

the seeds of it are clearly seen in, for example, Fries, 1952.

An item analysable into Elements in a statable relationship is said to be structured or to be a structure. It has a structure stated in terms of the Elements and their relations. This is a very general concept which can be applied to a wide range of different items. Any object of study may be structured on a number of different levels simultaneously, but Elements posited for a particular structuring must be commensurable. As an example

he will come

has a graphemic structure of alphabetic symbols (10 tokens of 8 types) and spaces (2), related in a certain linear order. It is also analysable as having a Clause structure of English Syntax, consisting of Subject (Pronoun) and Predicate (Verbal Phrase - Auxiliary + Verb). The letter 'h' has no place in the syntactic structure, nor has the verb 'come' any function in the graphemic one. Within a hierarchical description the inventory of Elements of which a given Unit is composed, and the relationships between the Elements, comprise the Structure of that Unit. Anything which marks these relationships between Elements is a Syntagmatic Feature (often abbreviated "SF"): thus the structure of a Unit is described in terms of Elements and Syntagmatic Features.

The stress thus laid on anaylsis in terms of clearly-distinguished Structures and Functions led to the name "Structure-Function" being given to the model (cf. J.T. Bendor-Samuel, 1958 - title) at the period when Halliday's approach was called "Scale-and-

"Category". More recently preference has been shown for the single-word labels "Syntagmatic" and "Systemic" respectively.

Items grouped according to common Function are placed into one Class. Items grouped according to a common Structure are placed into one Type[1]. Sorting into Classes and Types may yield groupings which run parallel or which cut across each other.

In this thesis a number of terms will also be used which, while perhaps more usually associated with other models, are considered also to be of use within the model presented here. One of these is Delicacy, so named by Halliday but representing a concept of very general applicability. We describe as of low or primary delicacy a general statement or abstract analysis wherein minor variations and discrepancies are discounted: the scale of Delicacy is a cline from this extreme to the high delicacy of a statement which takes account of so many fine distinctions that virtually every item is regarded as unique and separately typed/classified.

System is another term especially associated with Halliday but one which was in use before it was adopted into Systemic Grammar. We here use the term to denote the case where a particular Unit is obligatorily specified for some Category within which there exists a choice between two or more mutually-exclusive Terms. This has been handled in some Syntagmatic treatments as a set of 'Modifications'

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[1] Type with a capital 'T' has this sense. It is used with a samll 't' in the correlative pair 'type'/'token' with the usual sense of the pair in logical, linguistic and statistical discourse.

of the basic Unit. It is not always possible, however, to establish the logical or syntactic priority of one of the Terms which is implied in making it the basic choice. In cases where the priority of the 'basic' over the 'modified' Terms is significant, this is handled in the present format by the two factors which cause such priority to be recognised :-

i. Statistical favouring: If one Term of a Category is far more commonly encountered in a random sample of data for the language, then this should be noted. "Favourite" may be used to describe the common term vis-à-vis the rare term/s, or statistical ratios may be given - see 1.4.3.7 p.56 below

ii. Marking: Descriptions will also indicate cases where the exponents (see below) of the various Terms are best described by taking one Term as "unmarked" and deriving the other ("marked") terms from it by the addition of marking features. A treatment using Systems in a similar way has been used by Thomas, 1969 (NB pp.80 f.) and Jacobs (1970) simultaneously with, but independently of, the first draft of the present thesis. If Systems for more than one Category are stated for a particular Unit ("simultaneous systems") the choices in each set are independent of each other. If the choices were wholly interdependent the case would be one of a single syntactic System with multiple exponents, if the whole Systems were mutually exclusive they would be syntactically a single System: in both cases the syntactic facts should be recognised even if the resultant categories should seem semantically heterogeneous. There are, however, cases where choice of a certain Term in one System determines or limits the choice in another - otherwise independent - System.

Alternatively a certain choice in one System can neutralise the whole of the other System - in this case alone no Term of the second System is stated for the Unit concerned.

Transformation is yet another term which had a general usage before its adoption by a particular school of grammatical theory. As relations between Units on the same Rank are covered by the use of "System" outlined above, we will use "Transformation" for a relationship between Units of different Ranks. Thus where we can state that if such-and-such is a grammatical exponent of a Unit of a given Rank, then by applying such-and-such operations it can be used as a grammatical Unit at some other Rank, then the two Units are transformations of each other.

Exponence is the relationship between a general or abstract item and a more specific or concrete example of the same. If a Term of a systemic Category is the abstraction, then the distinctive marks of a structure which has selected that Term are the Exponents of the Term. Where a Class of Unit functions as an Element in a structure at the Rank above, then in a particular utterance containing that Structure one member of the Class will be the Exponent of that Class - and, by ellipsis, the Exponent of that Element. Thus if, for instance, "NP" is a Class of Phrase-Rank Units which may function as Subject in a Verbal Clause and if "the man" is a member of that Class, then in the Verbal Clause "The man came" the item "the man" is the Exponent of NP in this particular example and may also be said to be the Exponent of (the Element) "Subject" in the Clause. Hitherto

we have simply said that a lower-Rank Unit "is" or "functions as" an Element. If specification is needed for clarity we may say that a relation of "representation" holds - Subject in the example above is represented by NP and NP is a representation of Subject. By the definition given above, representation is thus a special case of exponence. A third similar term, "realization" is used here, as we have already seen (p. 21 above) for the relationship between Levels: it is therefore not a form of exponence.

1.4.2. - The Phonological Level:

The Syntagmatic Model has a twofold Phonological component. For practical transcriptional and orthographic purposes it contains a 'C-phonemic' (Lamb, 1966a, 539) sector, while for more detailed theoretical analysis the Prosodic approach (see e g. Robins, 1957; Palmer, 1970) is more consonant with the way the other Levels are handled in Syntagmatic Grammar, (cf. Bendor-Samuel, J.T., 1960; 1966 title). This may be recognised as an example of different degrees of Delicacy (1.4.1. p24 above), with the balance and relative usefulness between degrees appearing somewhat different on the phonological Level. Thus the (low-delicacy) Phonemic approach brings everything into one system, gaining in generality and practical applicability at the cost of constraining into one mould aspects of the sound-system which may not naturally fit. So we have to use ad hoc devices such as 'Neutralisation', 'Restricted Distribution' and the like (Naden, 1971, Pt.I, pp. 96ff.). The polysystemic Prosodic

analysis, handles these latter questions within the theory, but cannot provide the general overview which is necessary as a basis for an orthography (except in certain marginal cases - see Naden, 1971, Pt 1, pp 140 f: Thomas, 1969, pp. 18-20). Both approaches are hierarchical and in fact tend to coincide at Ranks above the lowest. At the bottom of the hierarchy Phonemes (Phonematic Units) are built up into Syllables. At the highest Rank the Phonological Discourse is analysed into Discourse Sections which are analysed into Intonation Groups. These are very generally-appropriate Ranks, but hierarchy of specific Ranks is not a universal of Syntagmatic theory (as it is in some versions of Tagmemics) - it is admitted that the number and nature of the Ranks set up will be language-specific. Between the Syllable and the Intonation Group, Ranks of varying numbers and types have appeared in descriptions of phonological hierarchies (Phonological Word/Phrase/Clause, Stress-Group, Foot, Bar, Span and so on - see Naden, 1971, Pt. I, Ch. 7).

The Phonological Hierarchy is theoretically independent of the Syntactic and Semantic. It is sometimes found that the boundaries of the Units at Ranks in the Phonology may be precisely correlated with syntactically-defined pieces - for an example see Thomas, 1969, Ch. 2: on the other hand the phonological boundaries may reflect little of the grammatical structure - this is the case in Bisa, as described below, p.67

In either the Phonemic or the Prosodic mode the final phonological analysis may be realized either phonetically or graphetically - the same actual piece of language may be either spoken or written - but both sounds and characters are determined as realizations of phonological entities. It is, of course, possible to represent sytactic items directly by visual symbols, as in the traditional Chinese script and conventional symbols, such as "&, +, =, 1, 2, 3, ", but for general transcriptional and orthographic use the norm for the model is the alphabetic system which should be derived from the phonological structure.

The primary focus of the present study of Bisa is upon the Syntax. The Phonology has therefore been treated in the Phonemic mode and at the lowest Ranks with a view to establishing usable transcriptions. The results are presented below, 1.5.

1.4.3 The Syntactic Level:

As this thesis is primarily a description of the Syntax of Bisa, we will comment here in greater detail on the application of some of the general concepts of the theory (as outlined above, 1.4.1 to description on the Syntactic Level.

1.4.3.1 Structure, Function, and System:

The Syntactic Hierarchy of a language is described Rank by Rank. There are some arguments for starting description with some readily-accessible mid -rank Unit - perhaps the Clause - and proceeding therefrom to analyse downwards through

the lower Ranks and to synthesize upwards through the Ranks above. It is more common, however, to start either at the higher end of the hierarchy and work downwards through the Ranks, or to start at the lower end and proceed upwards. At each Rank it is necessary to describe the possible structures of Units of the Rank and group them into structural types. The functions of the Units are also examined and they are grouped into functional Classes. As the functions are stated in terms of the structures of the Rank above, and the structures in terms of Elements represented by the Units of the Rank below, there is inevitably cross-reference between the descriptions of adjacent Ranks which leads to some repetition. Normally, a description touches on each of these inter-Rank relationships twice, once at each Rank, with the focus on each end of the relationship in turn. The redundancy of this approach is retained as it leads to improvement in communication by reducing physical cross-reference and memory-load. A description which starts with the highest Rank will be able to give at each succeeding Rank a full treatment of its Unit's functions as these are statable in terms of what has already been described. The structures will be touched upon more lightly as they will not be fully grasped before the reader reaches the Rank below where the Units functioning in those structures are detailed. The reverse will, of course, be the situation with a description which starts at the lowest Rank[1].

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[1] It should be clear that we are here dealing solely with the presentation of a description of a language. In heuristic procedures Ranks, Levels and relations are tackled wherever they are most accessible, and analysis proceeds 'outwards' from these points. In theory the whole hierarchy is a unity and there holds between Ranks a single reciprocal relationship.

In some cases Structural and Functional criteria are independent: - a Class of Unit may have members with many differing structural Types, and members of a single Type may function in various Classes (cross-classification). In other areas Class and Type may be inseparable: - only Units of a certain structure having a given function (parallel classification). The third possibility is that members of a Class may be divided into several Types, but these latter have no members which occur in other Classes: or Units of a given Type are divided into functional Classes which do not contain Units of any other Type. In cases of this third category the logical relationship would determine the structure of the description. In natural language, of course, these logically-different types of relationship may be mixed and combined in only partially-consistent ways.

Apart from modifications in accordance with the possibilities outlined in the foregoing paragraphs, the basic treatment of a Rank in a Syntagmatic description which starts from the highest Rank, as in the case of the present thesis, is as follows:

1. The Functions of the Units of the Rank.
2. Functional Classes of Units.
3. The Structure /s of the Units.
4. Structural Types of Unit.
5. Systems of the Rank.

- The Functions of the Units are described in terms of Classes which "function as" or "represent" given structural Elements in the Rank above, The Classes have non-overlapping

membership, but may have multiple functional classification criteria. For instance, if some words function as Heads of Nominal Phrases, some as Attributives, and others as both, we do not set up "Noun" and "Adjective" as single-function Classes with some words belonging to both classes: rather we set up three Classes "Substantives", "Adjectives (only)" and "Nominals (both functions)". We discuss the structural description of Units in greater detail in the following sections.

1.4.3.2 Elements:

The immediate constituents of a Unit are its Elements (but see below 'Syntagmatic Features'). In abstract analysis these could be designated by numbers or by arbitrary symbols. They are wholly detected and defined in terms of places in the structure of the Unit in question, correlated with with Classes of items - Units of the Rank below except in cases of Recursion (1.4.3.4 below) - which function thereas. In practical description, names are developed from the terms of traditional grammar which give some assistance to discussion and recall - "Subject", "Main", "Root" and so on.

The Elements of a Unit are listed in the description of the structure of the Unit. Where Units have identical structures apart from the presence of an extra Element in one, then they may be considered to belong to the same Type and the structure of the Type is said to have an "optional" Element. Elements whose presence is criterial to allotment to a given Type are "obligatory" to that type. If a difference of Elemental structure correlates with any other syntactic feature (function of the Unit, Syntagmatic Feature/s of the Unit, Classes of

lower Unit representing another Element, etc.) then it is not permissible to set up a single Type with the Element concerned optionally present.[1] If there is no such correlation the 'optional Element' analysis must be used. If it is necessary to unite or distinguish in contravention of these rules, in connection with some other criterion: - Phonological, formal Semantic, or related to something in the linguist's own language or theory of Universals - then it should be made clear that it is this and not the structural Type which is the determinant of the proposed grouping.

1.4.3.3 Syntagmatic Features:

A list of the Elements does not exhaust the information necessary to describe the structure of a Unit in this model. Looked at from the other end, this means that not every isolable item in a particular example of a given Unit is an Element or part of an Element. The Elements are distinguished and their relationships indicated by Syntagmatic Features (abbreviated SFs). An illustration is the case of a mathematical formula such as:

$$3 + 4 = 7$$

- where "3", "4", and "7" are the numerical Elements of the proposition, while "=" and "+" are non-numerical Features signalling the relations between the Elements. Thus a full characterization of a Unit includes a description of its Syntagmatic Features as well as a list of its Elements.

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[1] An exception is the case where the selection of a certain optional Element in a low-rank Unit may constitute a Syntagmatic Feature at a higher Rank.

1.4.3.3.1: Syntagmatic Features may be considered in terms of their various Functions. Thomas (1969) introduced the distinction of "relational" SFs which show relations (links) between items, and "demarcative" features which distinguish (separate) items. This does not seem to give a sufficiently fine-grained analysis of the various possible functions. "Relation" is a word of very wide coverage - that two items are distinct is a relation between them: also there are a number of different forms of link between items which may be indicated by Features. On the other hand "demarcative" is used by Thomas to mean, not only indicative of a transition from one item to the next - the normal sense of "demarcation" in linguistic discussion - but also the 'marking' of an item to indicate its Type, Class, or some other characteristic. We would therefore set up the following functional Classes of Syntagmatic Feature[1]:

1. Boundary Features: these indicate the beginning or end of a Unit or Element of a Unit.
2. Distinctive Features: these are necessary or sufficient markers of a syntactically-significant distinction. They may be subdivided as:

a) Structural Features: these serve to indicate which of the constituents of a Unit is to be taken as which Element of the structure. This will be particularly important in the case of the presence of several members of a Class

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[1] Examples of Syntagmatic Feature Functions and Structures are given under 1.4.3.3.4 below.

of lower Units which has several potential functions in the Rank in question.

b) Functional Features: these mark a Unit as having a certain function. This will be particularly important for Units of a Class which has multiple function-potential in the Units of the Rank above.

NOTE: Normally a Structural Feature of one Rank will be automatically a functional marker in the Rank below and vice versa. There may, however, be cases where a SF functions solely as a structural or a functional marker.

c) Systemic Features mark the selection of a Term in a syntactic System.

1.4.3.3.2: A wholly separate question is that of the form of the SFs. In the mathematical example (p.33 above) the operation symbols "=", and "+" were Features. The order of the Elements and Features is also a significant Feature:

* 3 + 7 = 4

and * 3 4 + = 7

are not valid. In other mathematical expressions vertical position (" ¾, " 2^2 ") or grouping-symbols (brackets in "4 x (3+6) = 36") may also be used as Features. In the same way a wide variety of aspects of an utterance may be used as SFs of its structure. We may in particular notice the following common Types:

1. Particles: these are Featural Morphemes (see 7.1 p231 below) with a free or clitic status.

2. Inflections: these are bound Featural Morphemes.

3. Units: a normally-structured Unit of any Rank may function as a Syntagmatic Feature. This most commonly involves double function (1.4.3.3.3 below) but occasionally a Unit may have a solely featural function.

4. String Order: often it is the linear order of Elements (temporal in speech, spatial in writing) which acts as a Syntagmatic Feature. Units composed of the same Elements and SFs (of the other Types) but with a different string order are treated as differing in Type if they contrast in meaning or if there is any other distinction which correlates with the difference in order. If the change in order makes no difference then a fluctuation (free choice) of the ordering in question will be shown as a structural characteristic of the Unit.

5. Selection: the selection (from several possible) of a certain Element (or a certain Element of an Element - e.g. Head Word of Nominal Phrase functioning as Subject in the Clause) may correlate with some other factor in a way which is syntactically significant. In this case the selection of the item in question will be a SF of the Unit in which the choice is significant.

NOTE: At primary delicacy the range of lower-Rank Units which may represent the given inventory of Elements is a basic characteristic of a Unit: this information is presented in the description when the Elements are listed with a format such as "Nominal Phrase (functioning as) Subject"

- usually symbolized NP(S).

6. Suprasegmentals: a featural function may be fulfilled by phonological suprasegmentals such as Intonation Contours (see Naden, 1971, Pt. I, pp. 118ff) or Tone Patterns (cf., e.g. Thomas, 1969, pp. 23-4 and passim). Another example of a suprasegmental type of Feature would be the use of sporadic hesitation, repetition, and/or similar phenomena as a feature distinguishing Terms of a Discourse-style System (see 2.2.3 below)

7. Omission: deletion or obligatory absence may function as a SF. This will only be postulated where there is reason to assume that the forms in which the item in question is present are in some sense more general or basic. The most usual example would be to treat an Imperative as marked by omission of the normally-obligatory overt Subject, rather than making "Subject" an optional Element for all Verbal Clauses, which just happens to be selected for every Type except the Imperative.

1.4.3.3.3: There are many instances where an item has dual function. In a mathematical expression like "2^2" the superscript index is a numeral with some 'two-ness' remaining (in contrast with "2^3" etc.) but is also an operational or relational feature. We may note two linguistic cases:

1. SF with Dual Function: a SF may mark more than one syntactically-significant relation. For example, a distinctive feature which occurs in string order in

a fixed position in relation to the beginning or end of some Unit, thereby also serves as a boundary-marker.

2. Unit with Featural Function: it is possible for a Unit to act as an Element of structure but also to double as a SF. This will always be the case when selection is a SF (1.4.3.3.2-5 above). An example would be "Once upon a time . . ." which might be analysed as an ordinary Temporal Phrase functioning in the structure of a Clause - substitutable with "Last week", "Three years ago", and so on - but also serves as a Discourse-Rank SF marking the beginning of a Fairy-Story - not so substitutable. Another is "I don't know who did it" where "who" is both a NP functioning as Subject of the Relative Clause and as the SF which marks that it is, in fact, a Clause Construct (1.4.3.4 below)

1.4.3.3.4 These various Types and Classes of Syntagmatic Feature may be illustrated in more detail by examples from Bisa;

a) Functional Classes:

1) As an example of Boundary Features we may cite the Bisa disjunction (AN 1)[1] which marks a new sentence, especially where there is adversitive meaning, or a new speaker or Paragraph. Another is (Y) which is a Clause-final SF of a Negative or Interrogative Clause. Its major function is to mark the end of the Clause dominated by the relevant category - the distinctively negative or interrogative nature of the Clause is marked by other SFs, though (Y) may be considered to have the secondary function of reinforcing the non-positive/assertive mode of the Clause

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[1] For Morphemic Transcription see 1.5.2 below.

Systems (thus constituting a 'SF with double function' - see p 37 above).

Examples :[1]

1. / I duniya nyinta-baa do. AX023
An k 'i zu-n Wusu 'w so. /
you world pleasant-ness know.
but that 'you follow-will God 'to also

" You have known enjoyment of life.
But you should follow God, too. "

(further examples follow)

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[1] For format of examples, conventions and Glosses see 1.5.3 and 1.6 below.

2) // " A soor." - " Eheem ! An gwaa k'a ba naa'w'i[1]... " //
AX043
they five - yup ! but man that'he isn't this'in'(neg.)...

AM.: " It's five. "

IS.: - " Yes ! But a man who wasn't here ... "

[// Eheem // is a SF of Discourse System]

3) // Ta ibii ka'y[1]? // - "Where are you going?" AX003
go you where'(?)

4) // Panni guta bee n ' i[1] . // - "It's not a big thread"
thread big not is'(neg.) AJ015

ii) Structural Distinctive Features in Bisa include (N2) - the "copula" marking a Nominal Clause predication (e.g. 4 above, 5 below). An example with double function is the selection of a Verb Word such as (DAMA) - "be able" as head of the VP in a Bisa Clause, marking a Sentence structure in which the succeeding Clause is in a relationship of Dependent to Main with the Clause containing (DAMA), examples 6 & 7 :-

5) // A dan to n Diin. // -" His younger brother's name is
his youngbro. name is Diin Diin. " AD002

6) // Nbɔɔn b'a dama ni'n ta gan ma ... // AN020
they not'selves able they'+ go foot by ...
"They wouldn't have been able to walk ... "

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[1] For (Y) in Reading Transcription see 1.5.3.2.1 p. 73 below.

7) / Ibii yi dama ibii peen sa i pi bi wosi-n koo? /
you self able you knife take you water the cut-will eh? AJO1O

"Could you cut water with a knife?"

iii) An example of Functional Distinctive Feature in Bisa is the order of Phrases in the Verbal Clause. If there are two NPs they are marked as Subject and Object solely by their linear order. Another is the particle (K) which marks the Relative function of a Clause Construct functioning in the Nominal Phrase:-

8) NP(S) - NP(O)-VP(PD)

/ Ni'n bee kide. / - "They brewed beer." AB001
they'+ beer brew

9) NP(S) -SF -NP(O)-VP(PD)

/ Koo naa nyinbonno noon miiyaa bri gwaa sa-le'y. / AE002
place this girls these eye not man take-will'(neg.)

"The girls round here won't look at a man."

10) NP(S) - NP(CP)
NW(H)SF- VC.Cstr(Q) -Dem

/ Zi ku 'n t 'a ba biiyo'w bi naa :- / AH001
work that'they usually'it do rainyseason'in the this

"The following is the work they do in the rainy-season :-"

11) / Gwaa k 'a min miŋa pi, k 'a fobile bo n a ka'w. / AQ002
man that'he word good speak,that'they food putout they it give'to

"The man who says a good saying should be given some food."

iv) Features which mark Terms in a System are such items as the use of Sentence - final (RAA) or (KOO) to mark the Question - e.g. 7 above, 12 + 13a below (as opposed to the unmarked Declarative - e.g. 13 b) mode of the System of Mood, or of the

suffix (-LE 1) / (N 1) to mark the 'Non-Past Tense' - e.g. 9, 14 a (vis-à-vis the unmarked 'Past' - 14 b) in the Clause :-

12) / Ibii n fo gweli-gweli ba moo n raa ? / AS009
you + thing nice-nice did me for eh?
" Did you do this kind deed for me ? "

13 a) / A yi kina koo? / - "Is it like this?" AM015
it (contin.) thus eh?

13 b) / A yi kina / - "It is like this." AR032

14 a) / Ibii gonɔ sa-le ... raa ? / AN040
you cowhide take-will ...eh?
"Will you take a cow-hide ... ?"

14 b) / Gonɔ zaa n 'a gonɔ bi sa ... / AN008
cowhide owner +'he cowhide the took ...
"The man with the cow-hide took it and ... "

b) Types of Feature:

i) Particles are seen in the examples above: (AN 1) in 1 and 2, (Y) in 3 and 4, (N 2) in 4 and 5, (K) in 1, 2, 10 and 11, (RAA)/(KOO) in 7, 12, 13 and 14.

ii) An example of Inflectional SF in Bisa (a language where inflections are not common) is seen in the case of the suffix (-LE 1) in examples 9 & 14 a above (its alternate (-N 1) in 1 and 7). Another suffix in Bisa is (BAA 3), a nominal-function suffix : -

15) a. / guta / - (adj.) "big"
b. / guta-baa / - (noun) "greatness"

16.a // nyinta // - (adjective) "sweet, pleasant"
16.b // nyinta-baa // - (noun) "sweetness, pleasantness (e.g. 1).

iii) A Bisa example of a Unit with featural function is the Bokale Clause: this has the structure of a normal Verbal Clause but its function is as SF of Major Sentence Type IV structure (see 3.1.1.4, p. 103).

iv) We have already seen the use of Linear Order as a SF in examples 8 and 9 above. It is also seen in the use of fronted position of certain Clause-Elements in order to mark the Focal term of the Clause Rank Focus System (4.5.4, p.161), and in the distinction between the temporal/conditional Antecedent (pre-posed) and the purpose/result Final (post-posed) Dependent Clauses in the Major Sentence of Type I :-

17. N (O)$^{foc.}$-NP(S)- SF -NP(O)^{repeat}-VP(PD)
// Dan a n a wu-n // AM002
farm he + it work-will
" He is a farmer "

18. VP(PD)$^{foc.}$-NP(S)-NP(IO)'Rr
// Da a sii-da'w // AF003
rode he horse-female'on
" He rode a mare "

19. V.Cl.(ANTECD)$^{temp.}$ | V.Cl(BASE)| V.Cl.(FINAL)
// Ku'nyi kaaku ten baa ku, ni'n ta k'a va a sara bi ze //
V.Cl(BASE)| V.Cl.(FINAL)
that'date three time come [illegible] AV005
that'they go their play the hit
" When the appointed third day arrived, they went to go and have their party. "

v) We have seen in the case of (DAMA) - examples 6 and 7 above - an example of the Selection of a sub-class having featural function. Another would be the selection of an Interrogative NP in a Clause - for instance one with (BƆ 1) - "what?" as Head - to function as an Element but also in double function (cf. p. 37 above) as SF of the Interrogative mode of the Clause-Rank Category of Assertion.

20) / Bɔ a ka-n mɔɔ'w'i ? / - What will he give me?" AX016
what he give-will me'to'(?)

21) / K'i a bɔ ba'y ?) - "What to do ?" AX004
that'you go what do'(?)

vi) In Bisa the use of Phonological Suprasegmentals does not bear a very heavy functional load. The use of Intonation - in conjunction with the Particles (RAA)/(KOO2)/(GE 1) - in marking a Question (see 1.5.1.3, p. 68 below) is the only example. In many languages, of course, the Question/Statement contrast, and sometimes other comparable items, may be marked solely by Intonation. A similar use exists in English - Intonation reinforces other marks of a Question, may be sole marker (usually in a Query - "He's coming?"), and is also used with Stress in various systems of prominence (cf. Halliday, 1963,1967)).

vii) Omission of the Subject NP is used in Bisa as in many other languages to signal an Imperative. In this language Imperative is a Term in the intersection of the Person/Number System with the Jussive Term of the Clause-Rank Assertion System - i.e. it is

second person singular only (e.g. 22 a , 23) below - and has an alternate with Particle as marker and overt NP(S) which is the form of other Jussives (22 b). A more peculiarly Bisa use of Omission is in the Pronoun System when functioning as Axis in a NP(RN) [1]. The basic structure is + NP(AX) + SF^{RN} but with the third person singular only, the NP(AX) does not appear (e.g. 24, NB 24 c) : -

22 a) ~~NP(S)~~ - VP(PD)
/ ____ Ta ! / - " Go !" (recorded conversation)

22 b) SF 'NP(S) - VP(PD)
/ K'i ta'n ./ - "You must have a go !" BB008
that'you go'with (at telling a riddle)

23) ~~NP(S)~~ - VP(PD)
/ ____ Doo ! / - Go home !" AS038

24) (elicited paradigm)

a) / A a ka moo'w. / - "He gave it to me."
he it gave me'to

b) / A a ka ibii'w / - "He gave it to you."

c) / A a ka ____'w. / - "He gave it to him."

d) / A a ka woo'w. / - "He gave it to us"

e) / A a ka awo'w. / - "He gave it to you-all. "

f) / A a ka n'o. / - "He gave it to them."

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[1] Relational - with postpositional Relator.

1.4.3.4 Recursion and Singulary Branching: The normal situation in a hierarchical analysis is that Units of a given Rank function as Elements of the Rank above. The structure of a Unit may, however, have a minimal form with only a single Element of Structure. Thus a Clause may have only one Element - represented by a single Phrase - and so on. This situation is described as "singulary branching" and may lead to a Unit apparently functioning at a Rank higher than that immediately above - the one-Phrase Clause functioning in a Sentence gives the impression that the analysis of the Sentence yields a Phrase as one of its Elements. A Rank the majority of whose units (whether in terms of type or of token) are formed by singulary branching is described as an "ill-formed" or "ill-developed" Rank.

Units may, however, be presented as functioning at a Rank lower than that at which they normally appear - that is, as Elements of Units at their own Rank or lower. Units with such a function are described as "rank-shifted" or as "Construct" ("Clause Construct" , &c., abbreviated Cstr.). This possibility has been found to cover most of the recursive possibilities of natural language.

The above cases required comment because they represent a departure from strict hierarchical relationship. In singulary branching we find a Phrase, for instance, apparently functioning in the Sentence in commutation with Clauses, while in rank-shifting we find the Phrase-Construct (or whatever it might be) functioning as an Element of a Phrase, Word or other lower Rank.

There is also a third type of deviation from hierarchy apparent in natural language. This is where an Element of a certain Unit may be represented, not only by a single Unit

of the Rank below, but also by several such Units of a similar type. One of the commonest forms of this phenomenon is the coordination of Nominal Phrases - "John came" or "John, Albert and Fred came." . This may involve mere juxtaposition, or there may be some definite structuring or SF ("and" in the example above). Such a group of similar Units fulfilling together a function which would normally be filled by one of them alone constitutes a sort of limited sub-Rank, and is described as an "Expression". In this way we may say that the functions filled in English by a Nominal Phrase may also be filled by a (Coordinate) NP Expression constructed according to certain rules which must be stated. This may conveniently be stated in a description at the end of the section on the structure of the higher-Rank Unit. The rank-shifted functions of a Unit as Construct are similarly described at the end of the presentation of its other functions. At all but the primary degree of delicacy there will probably be further restrictions or modifications to be specified (not every Clause can be used as Construct, not every NP can be replaced by an Expression, or used as part of one, and so on.) .

1.4.3.5 - Formulæ and Displays: A Syntagmatic grammar can be presented by purely verbal descriptions, but it is often clearer to make use of formulæ and various other visual display formats. These are thus not part of the theory but are used for practical purposes as and when they provide a more readily comprehensible description.

1.4.3.5.1 - Formulæ : A Formula presents the structure of a Unit in a basically linear form. A full Syntagmatic Formula is an equation in which the symbol representing the Unit whose structure is presented by the Formula appears on the left-hand side while the structural analysis appears on the right. Letter-symbols represent the Units of lower Rank which form the constituents, while the symbols for the Elements of which they are exponents appear immediately to their right, in parentheses. Thus:

F.1[1] NP(S) (in, e.g., Ch.4, F.16 - p.144)[2]

symbolizes "A Nominal Phrase functioning as Subject."

Obligatory Elements are preceded by " + " and Optional Elements by " ± ". An Element marked ± followed elsewhere in the same Formula by " ∓ " means that one or the other may occur, but not both. Items which are substitutable for each other as exponents of the same Element are enclosed in curly brackets :

F.2 N.Cl.V = $+\left\{\begin{matrix}\text{Cl.Cstr.}\\ \text{NP}\end{matrix}\right\}$(TOP) + BI 6 (SF)
(Ch.4, F.12 - p.141)

F.2a NumW.St.1 = ± NuM^{D}(TEEN) + $\text{NuM}^{\text{A,B,C}}$ (DENOM)
(Ch.6, F.6 - p.223)

Syntagmatic Features of string order are reflected in the order of the Element/exponent symbol-groups in the Formula (from left to right). Variable linear order may be indicated by an arrow:

F.3 Maj.Sent.II = $\overleftarrow{\quad\text{or}\quad}$ + Cl.(EFFECT) + Cl.(PRECND)
(Ch.3, F.2 - p.102)

or by marking potential alternative positions by some dummy symbol :

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[1] Formulæ are numbered serially, a separate series to each Chapter.

[2] Actual items from the Bisa analysis are used as examples in this section.

F.3a ... - A* - ± NP(TEMP) ± AP(ADJCT)*

* NOTE: A = alternative position of (ADJCT)
(part of Ch.4, F.16)

- Greater degrees of fluctuation in linear order may render these linear formulæ so complex as to be confusing rather than helpful: in this case parallel formulæ may be presented, one showing logical implications and the other linear sequence, or the formula may have appended notes (cf. e.g. F.3a above).

Particles or inflections acting as SFs of the structure may be added to the Formula as superscripts before or after the appropriate Element[1], or else placed on the line with " (SF) " as their function-label. The latter is more suitable if they are optional or enter into complex relations of logical implication, the former if they are obligatory concomitants of some item:

F.4 Maj.Sent.IV = ± Cl.(ANTECD) + BokaleCl.Cl.(SUCC)
(Ch.3, F.4 - p.104)

F.5 N.Cl.I.iv(Core) = + NP(TOP) ± N 2 (SF) + {NP / AdjP}(COMM)
(Ch.4, F.5 - p.136)

Where selection of a sub-Class of lower-Rank Unit as immediate or mediate constituent has structural significance, this may be indicated in the Formula by a letter-symbol index (derived from the mnemonic 'name' of the item concerned) preceding the main Class-label, or else by a following superscript reference-number or -letter. Thus the Quotative Clause Predicator is symbolized:

F.6 Quot.VP (PD) (Ch.4, F.20 - p.150)

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1 Inflections have hyphens on the side at which they are bound. Thus /-re/ is a suffix. A prefix or infix (these do not occur in Bisa) would be " x- " and " -x- " respectively.

but the Quotative VP could have been symbolized:

F.6a $\underline{VP^{A.c}}$

1.4.3.5.2 - Readings: A "Reading" of a formula (cf. Longacre 1964, pp.25 ff.; Merrifield, 1967, 43 ff.) is a Formula for a specific variant of the Unit in question, a choice having been made for each of the options. Thus a Formula such as F.5 above yield

R.1 NP(TOP) - NP(COMM)

R.2 NP(TOP) - (N2) - NP(COMM)

R.3 NP(TOP) - AdjP(COMM)

R.4 NP(TOP)-(N2)-AdjP(COMM)

1.4.3.5.3 - Representations: From a Reading we can obtain a "Representation" by deleting the function labels and replacing the lower-Rank Unit symbols with the Formulæ for their structures at their own Ranks. Thus, given R.2 of F.5 (above) and :

F.7 NP.I.ii = + PnW(H) ± QuantW(TOT) ± DemW(DET) (Ch.5, F.1 - p.174)

F.7a NP.II.iii.3 = + $\left\{\begin{matrix}\text{DemW}\\\text{NumW}\\\text{QuantW}\end{matrix}\right\}$ (H) ± DemW (Q) (Ch.5, F.7 - p.185)

we get the Representation:

Rp.1 + PnW(H) ± $\left\{\begin{matrix}\text{D.W}\\\text{N.W}\\\text{Q.W}\end{matrix}\right\}$(Q) - (N 2) - + $\left\{\begin{matrix}\text{D.W}\\\text{N.W}\\\text{Q.W}\end{matrix}\right\}$(H) ± DemW(Q)

- This process is "Derivation" and any stage is a "derivative" of any preceding one. Alternate Readings and Representations will finally yield a Morphemic Representation consisting of a string of Morphemes (with indication of syntactically-significant non-Morphemic features) which, with its Derivation, indicates the Syntax of a specific utterance (in the case above, one like: /(a n bi)/ - "that's it !" - AJ016).

1.4.3.5.4 - Matrices: The product of any pair of cross-cutting categories may be described and displayed by a Matrix. The stipulation "pair of categories" is purely concerned with practical presentation on paper. A Matrix of any number of dimensions is conceptually possible and may be displayed by a battery of two-dimensional 'slices', each clearly labelled to show its relation to the other dimensions. This format is most suitable in the treatment of Systems applying to the same domain, particularly where the exponents are all of a comparable type:

MATRIX 1 - Bisa Personal Pronouns

(cross-classified by Person and Number)[1]

NUMBER / PERSON	SINGULAR	PLURAL
1st.	/mɔɔ/ , /m/	/wɔɔ/ , /ɔɔ/
2nd.	/i/ , /ibii/	/a/ , /awɔ/ , /abaa/
3rd.	/a/, /awɔ/, /abaa/, /abɔ/	/n/, /nbɔɔn/, /burɔ/ /a/, /awɔ/

1.4.3.5.5 - Tables: We reserve the term 'Matrix' for an orthogonal set of relations - with all the cells filled. A "Table" is a Matrix where a number of the intersections of the categories are not actualised. A Table may be used to indicate the possible combinations of partially-simultaneous Systems (cf. p.25). It may also supplement a complex Formula at primary delicacy which has some Readings which have not been found in data: the Table indicates which Readings have been

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[1] cf. Ch.6, Matrix 2, p.130 (M.T. ct. R.T. here)

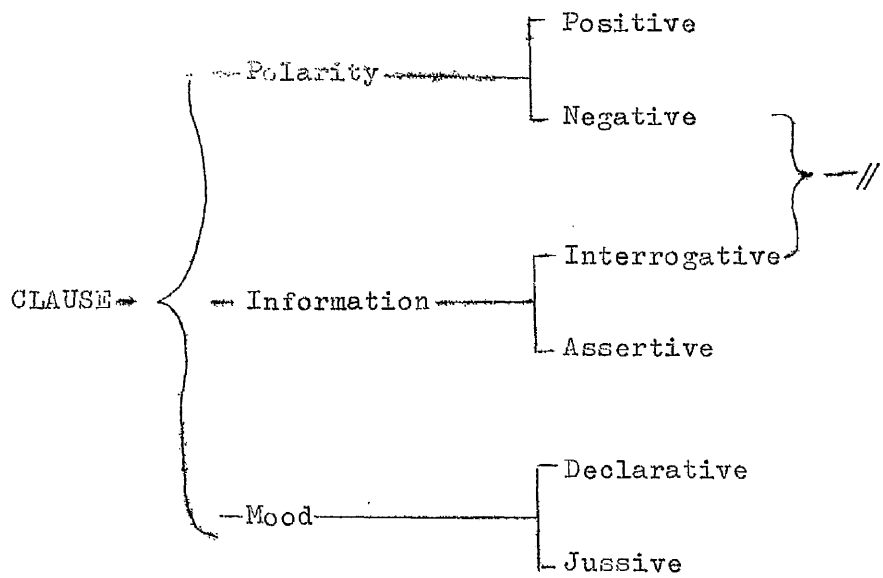
recorded. The Bisa Nominal Phrase of Type II is a case of this kind, the Table (p.177) indicating ocurrent Readings of Formula 3 of Chapter 5 (p.178). The Table is therefore a heuristic tool and is an indication that full evidence is not available - the Formula which gives a generalised account of apparently comparable data also generates items which have not been observed: if further checking reveals the existence of the missing items then the Table becomes a Matrix and is redundant beside the Formula, if the missing items appear to be impossible then the Formula makes too strong a generalisation and must be split into separate Types each with its own Formula.

1.4.3.5.6 - Systemic Diagrams: Systemic relationships may also be displayed by means of a systemic network-diagram of the Hallidayan type. The domain of the Systems appears as entry condition to the left of the diagram and centrally on the vertical dimension. Right-facing curly brackets enclose simultaneous Systems, square brackets the terms of a System. Left-facing brackets give entry to a System which is only operative if a particular combination of choices in other Systems has been made. We also introduce here the convention of a left-bracket with slashes (//) to show that a particular combination does not occur.

Thus the Diagram given overleaf shows that the Clause is the domain of simultaneous Systems of Polarity, Information and Mood. Each has two terms Negative and Positive, Interrogative and Assertive, and Jussive and Declarative respectively. All combinations Positive/ Interrogative/Declarative, Negative/Assertive/Jussive, and so on, occur <u>except</u> those with Negative/ Interrogative.

SYSTEMIC DIAGRAM 1

- a part of the Bisa Clause-Rank Systemic Network: see Ch.4, p.158



1.4.3.6 - Constructional Homonymity: At any Rank, two different derivations may yield the same string of symbols for a Reading or a Representation. Thus the final derivative of two different higher-Rank Units will be an identical Morphemic Representation. These cases will produce syntactically-ambiguous[1] constructions and are termed examples of "Constructional Homonymity" (C.H.). In a syntactic description the treatment of the potentially-homonymous structures may usefully have a note drawing attention to this fact:

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1 We are not concerned here with ambiguities derived from lexical homonymity, even where it involves Particles functioning as syntactic markers.

Example (cf. 5.4.1.4, p.190) :

" There is C.H. in the case of the string:

F.8 X - Verb Word - Relator - X

(where 'X' represents context not significant to the point at issue)

between the case where the string is derived from the maximal Reading of the Verbal Phrase Formula (Verb-Relational Phrase: 5.4.1.3, p.189) and that where it derives from the Formula for the Verbal Clause of Type II or III Core, with Indirect Object (4.4.2.2/3) or Type I with NP(LOC) in the Periphery (4.4.2.1) when these Verbal Clause Readings have third person singular Pronoun as exponent of the NP (IO/LOC) - with zero representation before the Relator (1.4.3.3.4, vii and e.g. 24, p. 45 above). Thus:

e.g. 1. PnW-PnW - V W 'Rr
// a a tunto 'w //

can mean "he tried" :

1.a NP(S) - NO(O) - VP(PD) Verb-Relational
// a a tunto 'w //
he him(self) strained 'at

or else "he poured it into it":

1.b NP(S) - NP(O) - VP(PD) - NP(IO) - Rr(SF)
// a a tunto =#= 'w //
he it poured (it) 'into

1.4.3.7 Corpus: Syntagmatic Grammar bases an analysis on a corpus of free (i.e. not elicited or translated) text material from native speakers. The reasons for this need stating in view of current controversies over the desirability of such corpus-based Grammars and whether it is possible and preferable to account for the speaker's Competence rather than his Performance.

The strengths of the corpus-based approach are:-

1) It is desirable that a model should enable a linguist to analyse a language other than his own native tongue: this is a practical requirement, and is also necessary to retain the normal meaning of 'Linguistics' - the alternative would be rather a branch of Philosophy.

2) Objective access to a native-speaker's Competence is not possible with present testing methods. Observation of recent discussions of English by English-speaking grammarians would seem to show that even linguistic sophistication by no means ensures the reliability of conscious decisions by a speaker attempting through introspection to assess the rules of his linguistic Competence. There is therefore no firm counter to the early structuralist field-work principle of trusting everything a native-speaker says in his language while regarding with gravest suspicion anything he says about his language.

3) Any limitation of the value of a particular corpus as a significant sample of the language is at least objective and may therefore be rectified by further research.

The real or alleged weaknesses of a corpus-based method are:-

1) Strictly speaking, the Grammar based on the corpus can only be a Grammar of that particular corpus. Any scientific study is, however, based on a sample of all possible observations: the more representative the sample the greater the confidence with which the description of this sample (or a conclusion based thereupon) is presented as valid knowledge about the whole field. At least

utterances which have been heard are possible and may be repeated. This is true even if they are analysed as the ungrammatical results of applying a certain performance-error to a grammatical basic derivative: - the same performance-error may presumably recur with that type of structure. Under 'Tables' (1.4.3.5 p.51 above) we discuss the case where a general formula generates items not found in corpus: the suggestion that further research is needed constitutes, of course, an admission that the original corpus was not adequate to support a Grammar of the language. On the other hand we cannot assume that unrecorded Readings of a formula must be permissible; it is frequently the case that a structure which seems wholly analogous to a particular set of grammatical items is in fact not permitted.

2) The corpus may be of inadequate size or may be skewed by depending too heavily on a particular individual speaker, dialect, or discourse-type. People may deliberately or unconsciously speak in an unnatural way to the linguist because of his sex (different ways of speech between men, between women, or from one to the other), status (foreigner, outsider, employer, learned person, non-initiate &c.), or recording activities (tape-recording, writing, typing). These are indeed practical problems which can vitiate a particular corpus as a basis for a Grammar. They are, however, at least objectively recognisable. Thus they may be avoided at the time of compiling the corpus, allowed for in making or using the description, or rectified in future research.

In working with a corpus, precise numerical information can be recorded about the number of examples of a given Unit available in the sample, and the relative frequencies of various items. This enables the reader to determine how broad-based a given survey might be and so evaluate the general applicability of the results. It is also a significant fact about a language that of two items -

both equally 'grammatical' - one may be of much more frequent occurrence than the other. Rather than use such vague terms as "favourite", "rare", or "common" a corpus-based grammar can state percentages of a sample of known size. In fact at the highest Ranks this matter of frequency is itself a question of grammaticality. Both acceptability and comprehension (the two sources of rule-of-thumb grammatical evaluation) can break down if a discourse uses lower-Rank Units which are grammatical in their own structures and immediate functions but departs extensively from their normal frequency - overloading, for instance, a language which prefers Clauses of simple structure with a multiplicity of examples of a permissible but rare complicated Clause Type; or making only occasional use of a hesitational particle which is normally interspersed liberally into a discourse.

1.4.4 The Semantic Level:

The third Level is the Semantic. There has been nothing published on this Level in the Syntagmatic model and its treatment is beyond the scope of the present thesis. For completeness, however, we give here a suggested possible structure for this Level.

1.4.4.1 In the present state of investigations, there seems to be no reason to posit a different <u>kind</u> of structuring for the Semantic Level. The problems of its study are due to the complexity and sheer quantity of material involved, and also to the fact that it is one stage further removed from the observable data of spoken or written language than even the abstractions of Syntax.

The minimal Units of the Level may be called "<u>Sememes</u>" for consistency of terminology (with 'Morpheme', 'Phoneme'). These will be the unanalysable particles of the semantic system of the language. Units of this sort are treated as "Semons" by

Lamb (1966b,31 and as "Semantic Components" by Weinreich (1962, 1963). The richness of this Level is due to the fact that the Morphosemantic realizations (cf. p. 21f. above) will usually have several Sememes as the "definition" (a term comparable to the Morphophonemic "spelling") of a single Morpheme.

1.4.4.2 On the Semantic Level the Rank above the Sememe will be that of the Lexical Word or "Concept". The Concept is the basic unit of the inventory of this Level: the description of a language contains a Dictionary or Lexicon which lists Concepts with their sememic componential analysis and their syntactic representation. In many languages the Concept is closely linked with the Word Rank of the Syntax (hence the alternative name "Lexical Word" if the mentalistic implications of "Concept" are unacceptable), while in others it may correspond rather to the Morpheme. Most languages also have a number of "Idioms" where a more complex syntactic structure realizes a single Concept.

1.4.4.3 When Concepts are treated dynamically, as elements in the generation or analysis of utterances, rather than statically as an inventory of their own Rank, they enter into structures at the next Semantic Rank, that of the "Concept-Cluster" or "Specific". Thus we might symbolize a certain English Concept as:

F.9 $(\text{COW})^{\text{CPT}}$

and this would be an item in the conceptual inventory (Dictionary) with a sememic formula something like:

F.10 $(\text{bovine})^{\text{Sm}} - (\text{animal})^{\text{Sm}} - (\text{female})^{\text{Sm}} \simeq (\text{unspecified})^{\text{Sm}}$

- the specific cow in the Proposition:

F.11 ("The cow jumped over the moon")$^{\text{PRP}}$

would then be a Concept-Cluster:

F.12 $(\text{COW})^{\text{CPT}} + (\text{ DEF. })^{\text{CPT}} + (\text{PARTICIPANT})^{\text{CPT}}$

Similarly the Concept:

F.13 $(\text{JUMP})^{\text{CPT}} = (\text{motion})^{\text{Sm}} - (\text{agent-initiated})^{\text{Sm}} - (\text{up at start})^{\text{Sm}}$

enters for the particular Proposition mentioned into the Specific:

F.14 $(JUMP)^{CPT}$ + $(ACTION)^{CPT}$ + $(PAST)^{CPT}$

- As may be seen from this tentative example, propositional functions such as PARTICIPANT and ACTION may be treated as Concepts linked to the more substantive ones in the Specific structures; alternatives which might be considered are treatment as Syntagmatic Features, or as Element functions of the Propositional Rank (like syntactic 'Subject' - yielding formulæ such as "SP(AG)" read as " a Specific functioning as Agent"). Following the approach suggested above, the Concept $(COW)^{CPT}$ might also enter into a Specific like:

F.15 $(COW)^{CPT}$ + $(QUALITY)^{CPT}$

which would eventually yield "bovine", while

F.16 $(JUMP)^{CPT}$ + $(PARTICIPANT)^{CPT}$

would be realised by "a jump" if supplemented by

F.17 $(ABSTRACT)^{CPT}$ + $(INDEF.)^{CPT}$

as "jumper" with $(ACTOR)^{CPT}$, or as "jumping" with $(ACTIVITY)^{CPT}$ - the gerundial "jumping is enjoyable" [1]).

The next Rank is that of the Proposition or Predication. This links one or more Specifics (Concept-Clusters) with a number of relational Valences as SFs : the sort of structure concerned is illustrated by Gleason's Stratificational "networks" (1964). Propositions are linked in various

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[1] "jumping" in the surface string would also derive homonymously from $(JUMP)^{CPT}$ + $(QUALITY)^{CPT}$ ("a jumping Jack") and again as a verbal participal ("while he was jumping", "he will be jumping") which will be generated by the Syntax from the original $(JUMP)^{CPT}$ + $(ACTION)^{CPT}$ when with, perhaps, $(EXTENSION)^{cpt}$.

higher-ranked structures - Conversations, Episodes, Topic-Spans - and so into Discourses. The work of S.I.L. members on the propositional structure of discourse gives some idea of the possible lines of investigation (Beekman et al. : 1970).

1.4.5 - Conclusion:

The above gives a brief sketch of the Syntagmatic approach to the study of Grammar and the writing of linguistic descriptions. The detailed study of the Phonological Level has been treated elsewhere - in the Phonemic mode, inter alia, by the present writer in Naden, 1971; in the Prosodic by numerous authors - see Palmer, 1970 and references therein. The model for a Semantic treatment sketched above is purely programmatic, though research by students at the Summer Institute of Linguistics' British School have shown that it can be used as a basis for further exploration. The bulk of the treatment above has concentrated on the syntactic Level, partly because this is the Level at which the analysis of Bisa in the body of the present thesis is directed, and partly because the treatment of this Level uniform with Naden, 1971, Chapman,1971 is not yet available.

1.5 - The Transcriptions

1.5.1 - Phonemic Analysis and Transcription:

We have stated above (p. 29) that our major concern in this thesis is with the Syntax of Bisa, but that the morpho-phonemic realization ("Spelling") of the syntactic material is the basis of the written form (p21, fn3, above). We therefore present here a brief sketch of the phonology of Bisa in the Phonemic mode, and describe the Phonemic Transcription based upon it.

1.5.1.1 Phoneme Rank - The Phoneme is the lowest or basic Rank in the Phonological Hierarchy: it is therefore not further analysed, though Phonemes may be grouped in accordance with contrastive components of the Phonetic realization ("pronunciation"). The Phonemes of Bisa are of three Classes according to function in the Syllable:

1.5.1.1.1 Vowels - these function as syllable-nucleus:-

TABLE 1

	Short		Long	
	Non-rounded	Rounded	Non-rounded	Rounded
Close	/i/	/u/	/ii/	/uu/
Mid	/e/	/o/	/ee/	/oo/
Open	/a/	/ɔ/	/aa/	/ɔɔ/

Notes:-

1) The "Long/Short" distinction, as in English, is only partly phonetic length, but involves other features:

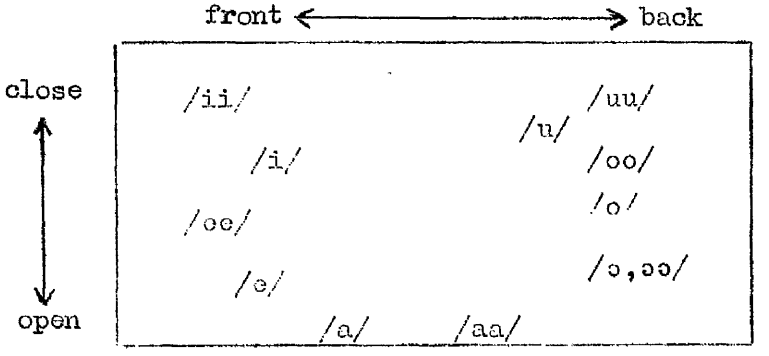
   a) /i/, /u/ and /e/ are more open than the corresponding Long Vowels.

   b) /i/ is more retracted and /u/ and /a/ more fronted than the corresponding Long Vowels.

   c) Otherwise the Vowels are phonetically much as the IPA value of the symbols used suggests.

The Phonemes might be placed on a second chart in accordance with their phonetic forms thus:

TABLE 2



/i/ = [ɪ]
/e/ = [ɛ]
/u/ = [ʊ]
/oo/ = [o:]
/a/ = [ɐ]

2) Significant allophonic variation is minimal, with the exception that:

a) /a/ is yet further fronted (cf.1.b above) when adjacent to a Nasal or to Pause (= [aɐ]).

NOTE: For "Pause" see 1.5.1.3, p. 69 below.

b) Any Vowel may be optionally nasalized when adjacent to a Nasal.

1.5.1.1.2 Nasals - these function as Syllable-Periphery or -Nucleus.

TABLE 3

Labial	Alveolar	Palatal	Velar
/m/	/n/	/ɲ/	/ŋ/

Notes:-

1) Nasals only show this four-way contrast in syllable-initial position. Syllable-final Nasal is [m] before Pause, and

before a Nasal- or Consonant-initial Syllable is assimilated to the point of articulation of the following Consonant or Nasal. This final undifferentiated archiphoneme is written //N// in theoretical discussion (see NOTE, below).

2) As the Nasal functioning as Syllable-Nucleus is always final in the Syllable it is always //N// .

3) In so far as 'syllabicity' of a Nasal is considered to be a Phonetic feature, we must say that there is a syllabic allophone of //N// which occurs only when functioning as Syllable-Nucleus.

NOTE:-

When a Morpheme ending in //N// is placed before a Morpheme beginning with a Vowel, the Nasal becomes initial in the following Syllable and has an alveolar point of articulation.

1.5.1.1.3 Consonants - these function only as Syllable-Periphery:-

TABLE 4

		Labial	Alveolar	Palatal	Velar
Plosives	Voiced	/b/	/d/		/g/
	Voiceless	/p/	/t/		/k/
Fricatives	Vd.	/v/	/z/		
	Vl.	/f/	/s/		
Vibrant			/r/		
Liquids		(/w/)	/l/	/j/	/w/

Notes:-

1) The columns are based primarily on the choice of homorganic Nasal to precede the given Consonant (1.5.1.1.2 Note 1 above).

Particularly in the case of /w/, this is classed as a Velar because a preceding //N// becomes [ŋ] .

2) /r/ is normally a voiced alveolar trill: before Pause it is devoiced. When Syllable-final it may phonetically absorb the preceding close Vowel and become syllabic, with rounded or non-rounded lips according to the type of Vowel concerned: this is interpreted phonemically as V + C :

[brʻ] = /bir/ "goat" (also [bɪr])

[brʼ] = /bur/ "Come!" (also [bɒr])

3) /b/ has as fluctuant allophone intervocalically in fast speech a voiced spread bilabial liquid, only lip position maintaining the contrast with /w/ :

[ʁwʼɔ] /awɔ/ "his hand"

[ʁwʻɔ] /abɔ/ "he went out"

4) /d/ has as fluctuant allophone intervocalically in fast speech a voiced alveolar flap [ɾ].

5) /g/ has as fluctuant allophone intervocalically in fast speech a voiced velar fricative [ɣ].

6) Before close or mid non-rounded (i.e. phonetically front) Vowels some non-labial obstruents have fluctuant allophones

/s/ = [s] ~ [sʲ] ~ [ʃ]

/k/ = [k] ~ [kʲ] ~ [tʃ]

/g/ = [g] ~[gʲ] ~ [dʒ]

7) Similarly before Rounded Vowels they have other variants:-

/s/ = [s] ~ [sʷ]

/k/ = [kʼ] ~ [kʷ]

/g/ = [g] ~ [gʷ]

8) The Voiceless Plosives are normally pronounced with light aspiration.

9) Otherwise Consonants have the pronunciation suggested by the IPA value of the symbol used.

1.5.1.1.4 : A number of other sounds are used in special words which are best treated as extra-systemic; particularly in loans and in exclamations and ideophones (Appendix E). As these occur alongside phonemic segments they are transcribed in slashes with appropriate phonetic symbols:-

i) /h/ occurs phonemically in the Baraka dialect (where it corresponds to Lebiri cognates in /p/ or /f/ - see 1.2.2, p.17, also Appendix D). The sound is found in the corpus in Baraka words (e.g. /ham/ - "this" AX094), loans (e.g. /alhamdulillay/ - "benedicatur !"[1] - AI001), and exclamations (e.g. /ehee/ - "aha !" - AX043).

ii) Nasalised Vowels[2] occur in exclamations (e.g. /ahẽẽ/ - "ahaa !" - AX107), and ideophones (e.g. /fõ/ - "pooh !" - AU018).

iii) A glottal stop [3] occurs in exclamations (e.g. /heʔ/- "hey!"- AX095), and ideophones (e.g. /kayʔ/ - "whop !"(snatching) - AV086).

iv) Other less-widespread such items are:-

[y] - close,front, rounded Vowel - /ÿÿÿ/ - (assent) - AZ004

[ʗ] - voiceless retroflexed click - /ʗ/ -"yes"

[ə] - mid central neutral Vowel - /əəə/ - "eeer..."

[ɣ̥] - voiceless Vowels - /ʔe̥e̥ / - "ahhh !"-BC038

[tʃ] - vl. alveolar affricate[4] - /tʃee/ - "chair/ /tiitʃa/-"teacher"

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1 For gloss see p.78

2 Transcribed in R.T. (1.5.3) with /m/ following the Vowel.

3 /'/ in R.T.

4 /ky/ in R.T.

1.5.1.2 - Syllable Rank: Syllables have a structure stated in terms of Phonemes. The major Elements of a Syllable are its Nucleus and Margin. The Nucleus is represented by a Vowel or a (syllabic) Nasal (1.5.1.1.1/2 above), and the Margin by Consonants (1.5.1.1.3). The permitted patterns are:

i) N - when the Nucleus is a Nasal there is no Margin.

ii) V(C) - syllables beginning with a Vowel are rare[1]: they occur:

a) In the Pronouns (see 6.4.3, p.230 below)[1].

b) In exclamations and particles:

/am/ (part.) - "but"; /oo/ (part.) - "or";

/ajii/ (excl.) - "no !"; /ah/ (excl.) - "ah !"

c) In loan-words including Proper Nouns:

/albasa/ - "onion/s"; /arzaka/ - "wealth" (Ar.via Haus. or Moré)

/Idriisu/ , /ibn Muusa/ - Ar. Proper Nouns

iii) CV - e.g. /ta/ - "go"; /fɔ/ - "thing"

iv) CVC - the Syllable-final C (as in VC, ii above) is // N //, /r/, /l/, /w/ or /j/ :

/mim/ - "word"; /mɔr/ - "lumbar region"

/bil/ - "call"; /naaw/ - "here";

/mɔj/ - "rice".

---

1 "Rare" in terms of type: in the frequence of occurrence of the Pronouns means that tokens of V(C) Syllables are quite common.

v) - CCV(C) - initial in cluster: / p, b, t, k, g, ŋ /

second in cluster : / r, w, j /

final - as in other -C Syllables (iv above):

/-pra/ - "two, twen-"; /tri/ - "usually"

/bri/ - (neg.); /gjaa/ - "stone";

/gwaa/ - "person"; /kwaaj/ - "all";

/gjaam/ - "girlfriend"; /ŋwam/ - "spoiling".

NOTE: Extra-systemic types (cf. 1.5.1.1.4, p.65) include various special patterns:

a) Clusters in loan-words:

/drajba/ - "driver"

/fransii/ - "French, Francophone"

/ibn/ - in Arabic names -"son of"

b) (C)NC Syllables in exclamations:

/hmʔ/ , /mʔ/ - "hmm !"

c) Vowel-less Syllables in exclamations and Ideophones (see Appendix E):

/ɳ̍/ - "No !!" ; /pss/ - "phew !";

/prrr/ - "crash !" (falling).

d) Syllable-final Consonants in Ideophones and loans:

/kjap/ - "plonk !" (standing solidly)

/mak/ - "ssh !" (sound of silence)

/raajit/ - "right" (Eng.)

1.5.1.3 - Higher Ranks: - the higher Ranks of Bisa Phonology are not treated in detail in this research. There is no ready correspondence of phonological Units with syntactically-determined stretches (such as Word, Phrase, or Clause).

This makes their study both more difficult and less necessary for syntactic analysis than in languages where some sort of correlation exists.

The most observable high-ranking phonological structure in Bisa, and one which is partially relevant to the Syntax, is the Intonation Group. There are three Types of Intonation Group, characterised by their pitch-patterns and other features:

1.5.1.3.1 - Type I : Normal Intonation - In this Type each I.G. starts on a relatively high pitch-level, and the overall pitch is gradually lowered throughout. In a long I.G. of this Type the final few syllables are very short, low-pitched, and indistinct, with Vowels centralized and voiced Phonemes devoiced. The end of this Type of I.G. corresponds with the end of an utterance, and a new I.G. also begins after interruption. The end of a Sentence - or a Sentence-medial hesitation - may also correlate with the end of an I.G. of this Type, but the phonological boundary frequently occurs in the middle of a syntactic Unit - sometimes even in the middle of a Word or Morpheme.

1.5.1.3.2 - Type II : Question Intonation - In Bisa a Question (3.1.4.1) is only rarely made from a Statement by change of Intonation alone: there is almost invariably a Particle - (RAA)/(KOO 2)/(GE 1)/(Y) as marker in Sentence-final position. The Type II Intonation Group which is used for Question Sentences has as its distinctive feature a Contour which is realized by added force and high pitch on the

penultimate Syllable, while the ultimate (i.e. the Question Particle) has a lower pitch and may also be lengthened with a further downward glide of pitch. The Pre-Contour has a down-drift less marked than that of Type I I.G., and in shorter examples may even be level or slightly rising in pitch.

1.5.1.3.3 - Type III : Command Intonation - The Intonation of an Imperative (2nd. person Singular Focal Jussive - 4.5.2) resembles Type II in rising to a crescendo of pitch and stress and then falling away. The Contour is realized in this case, however, as a pitch-glide on the final Syllable. In longer utterances there may be a secondary Contour - similar but less pronounced - on the syntactic Verb of the Predicator.

NOTE: a) In both the latter two Types the Intonation Group termination correlates with the end of a syntactic Sentence.

b) An I.G. of any Type is followed by Pause: - either the end of an utterance, or a brief break before the next Intonation Group begins, with certain effects on the variants of Phonemes - pp. 62 ff. above.

1.5.1.4 - Phonemic Writing : As in the examples given above, the Phonemic analysis is the basis of a Phonemic Transcription, which is written between slashes - / /. The Syllable-final Nasal is written as /m/, /n/, /ɲ/ or /ŋ/ as pronounced in context (1.5.1.1.2, Notes) - on occasion, however, // N // is used where context is irrelevant.

A sample of this Transcription appears in Appendix A.1.

1.5.2.1 The Nature of the Transcription: The discussion above (pp.21-57 indicates that the output oa a Syntactic analysis/description in this model is a derivation yielding a linear string of Morphemes with some non-morphemic Feature-indications, and also that a Morpheme is conveniently symbolized by an alphabetic designation derived from the phonological "spelling" assigned to that Morpheme by the Morphophonemic realization rules (p. 21 above). In order to distinguish the discussion of Morphemes as abstract entities in this way we adopt a Morphemic Transcription enclosed by parentheses - ( ) - with upper-case letters used for the writing. This convention presents problems in two main areas:-

1) Homonymy - the difference of a number of syntactically-distinct Morphemes may be neutralized in the Morphophonemics to yield (Phonological-) Homonym-sets. Bisa with its statistical preference for simple monosyllabic (or even single-Phoneme) Morphemes has of necessity a large number of cases of this type. We resolve the problem by assigning to each of the separate Morphemes in Morphemic Transcription a numerical index. Thus /ka/ may be:

(KA 1) - "hair, feathers"

(KA 2) - "where?"

(KA 3) - "give"

(KA 4) - "cultivate"

(KA 5) - "search"

(KA 6) - "cause"

(KA 7) - "be sated/sate"

(KA 8) - "drive (lorry)"

(KA 9) - "hail, spike"

(-KA 10) - "-soever" (indefinite suffix).

2) Allomorphy - the Morphophonemics may provide a number of different spellings for a single Morpheme, either with freely-fluctuant choice or under the control of Morphemic or Phonological context. In this case the convention is adopted that in Morphemic Transcription one of the allomorphs is chosen to symbolize the Morpheme[1], though with free fluctuation a complex symbol representing the allomorphs may be used (as in the case of (RAA)/(KOO 2)/(GE 1) p. 44 above). It will be necessary to keep in mind the Morphophonemic rules in order rightly to 'pronounce' a Morphemically-written item or analyse syntactically something in Phonemic Transcription.

1.5.2.2 Uses of Morphemic Transcription - The Morphemic Transcription is necessary wherever Homonymy and/or Allomorphy occur, and also in cases where 'Portmanteau' realizations are introduced in the Morphophonemics (see Lamb, 1966:17; Hockett, 1954:216) Thus in cases of Homonymity one might wish to make a statement which applied only to one of the homonyms but not to another, and such a domain can only be specified in Morphemic Transcription. Equally, a statement may be needed which is true for a given Morpheme irrespective of the particular allomorph indicated or chosen in any specific context. With portmanteau realization the separate Morphemes do not have separable overt realizations; for instance in Bisa the phoneme-sequence:

/bɔɔ/ - CV

realizes a certain Demonstrative Morpheme either in the Plural or with a locative Relator. These facts can only be presented clearly by using the Morphemic Transcription:-

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[1] The most common allomorph, or the least restricted in its environments, that which avoids homonymy, or in the last resort by arbitrary choice.

(BI 1) + plur. = /boo/ } homonymously
(BI 1) + (0) = /boo/ }

The other use for this transcription is for presenting the texts as syntactic samples for processing by computer. The use of capital letters and numerals is suitable to the normal card-punch input format for machine data, and information with purely phonological significance is dispensed with.

Particular processes impose certain purely mechanical adaptations on the symbols used. For the computer the Phonemic o/o contrast was rendered by the distinction of literal O and numeral zero. Also /ŋ/ and /ɲ/ were symbolized by digraphs (NQ) and (NY) - conventions which are also used for typewritten material in the present thesis. An example of a text in this Transcription is appended (Appendix A, 1).

1.5.3 Reading Transcription.

1.5.3.1 The above descriptions of the Phonemic and Morphemic Transcriptions reveal the drawbacks of both for the readable and comprehensible presentation of language examples. The Phonemic Transcription presents the same Morpheme in different allophonic forms in varying contexts - sometimes for purely or largely phonological reasons - and in a language like Bisa does not show boundaries of syntactic units. The Morphemic Transcription, for its part, cannot readily be read out without relying on considerable remembered or consulted morphophonemic information. For presenting texts and examples, therefore, we adopt a "Reading Transcription" which is to some extent a compromise between the other two. The Bisa Reading Transcription (R.T.) used for examples and texts in the present thesis is basically phonemic but with syntactic Word-boundaries marked by

Additional punctuational clarification comes from the marking of intra-Word Morpheme-boundaries with hyphens[1], intra-Sentence Clause-boundaries with commas, Sentence-initial letters with capitals, and direct speech with quotation marks. Further conventions for Bisa indicate analyses of portmanteaux, sub-syllabic Morphemes, and other special cases: these are laid out in detail in 1.5.3.2. below. The R.T. is symbolised by slash-brackets - / / . In the typewritten form used here /j/ is realized by /y/ and /ɲ/ by / ny /.

1.5.3.2 Reading Transcription Conventions:

1.5.3.2.1 - An apostrophe is used in place of a space to mark boundaries where one Word forms less than a whole phonological Syllable. This occurs in the case of the following items:-

(K) - the particle functioning as marker of Sentence-Construct (Relative), Jussive Clause, or Dependent Clause in Sentence - when followed by a Vowel-initial Word.

(M) - fluctuant allomorph of 1st.person singular pronoun (otherwise (MOO)) - when followed by a Vowel-initial Word.

(N) - various homophones - when followed by a Vowel-initial Word.

(O) - postpositional Relator: / 'o / following a Consonant or Nasal.
("in, at, on, to")
/ 'w / following a Vowel.

(W) - The Quotational Verb "say, said" - when followed by a Vowel-initial Word.

(Y) - The Clause-final Negative and Interrogative marker:
/ 'i / following a Consonant or Nasal
/ 'y / following a Vowel.

- And also with the shortened forms of the following when followed by a Vowel:-

---

[1] If, however, an anaptyctic sound enters at the boundary (p.217 below) this sound is underlined:
(BUR 1) + (N5) = / burun /

(BI 4) - Motion auxiliary "come and" - ⁄ b' ⁄

(BI 5) - Negative marker - ⁄ b' ⁄

(BRI 1) - Negative marker - ⁄ br' ⁄

(TI) - Habitual marker (? Baraka) - ⁄ t' ⁄

(TRI) - Habitual marker - ⁄ tr' ⁄

(YI 3) - Continuous marker - ⁄ y' ⁄

Note:- In the case of (YI 3) with a pronoun, e.g. ⁄ a ⁄, this form (⁄ y'a ⁄) is thus distinguished from the homonymous ⁄ ya ⁄ which is the form of the pronoun when preceded by a Vowel (p.252 below).

1.5.3.2.2 The above rules for (O) and (Y) may be combined:-

(BA2) + (O) + (Y) = ⁄ ba'w'i ⁄ - not existin (neg.) - "there isn't"

1.5.3.2.3 The "definite article" Demonstrative (BI 1) yields /bɔɔ/ homophonously (cf. 1.5.2.2 above) in the plural form, or with the postposition (O). In R.T. these homonyms are distinguished by convention:

(BI 1) + plur. = ⁄ bɔ'ɔ ⁄

(BI 1) + (O) = ⁄ bɔɔ' ⁄

1.5.3.2.4 When (M) or (N) (see 1.5.3.2.1 above) are followed by a Nasal they have an alternant form /mi/, /ni/ and this is conventionally terminated by an apostrophe in R.T. :-

⁄ wɔ nɔ mi'n i wu ⁄ hand lay me'on you do - "Put your hand on me" -AS023X

⁄ ni'n fɔɔna ze ⁄ - they flock hit - "they killed goats" - ABO01

1.5.3.2.5 Similar treatment is accorded to the particle (K) which has the form /ku/ when followed by a Nasal:-

⁄ Zi ku'n t'a ba...⁄ - "The work that they do..." AHO01
work that'they (hab.) 'it do...

Note:- When followed by a Consonant, (K) has the form /kuN/ :-

⁄ Kun la ba... ⁄ - "When rain comes..." AHO02

[1] For these conventions in presenting examples see 1.6 below.

1.5.3.2.6 A Syllable-final or Morpheme-final Nasal is written in R.T. as /-n/, as the Phonemic/Phonetic form can always be determined from the context (see p.62 above). :

1) "do repeatedly" - ⟨ binba ⟩ = /bimba/

2) "sew" - ⟨ sinsa ⟩ = /sinsa/

3) "twist and turn" - ⟨wunwusiga⟩ = /wuŋwusiga/

4) "I buy a shirt" - ⟨m fuu sin⟩ = /mfuusim/

5) "with her mother" - ⟨kan a da ki⟩ = /kanadaki/

Note: There are special rules applying to the Morpheme (M) which is so written in M.T. and R.T. (⟨m⟩) because it does not behave like an ordinary Nasal.

1.5.3.2.7 A Morpheme-final rounded or open non-rounded Vowel followed by (O), or any Vowel followed by (Y), has as alternative to the realization indicated above (1.5.3.2.1) a form with a lengthened Vowel. In R.T. these forms are punctuated with a final Vowel marked off with an apostrophe to signal the (O) or (Y) :-

(NKA) + (N2) + (NAA 1) + (Y) - /ŋkanaa/ - ⟨ Nka n naa'a? ⟩
"Who is this?"

(KINA) + (O) - /kinaa/ - ⟨ kina'a ⟩ - "thus"

Note:- There is a general rule that any three-mora Vowel (i.e. long + short, short + long, or three successive short occurrences of the same Vowel) generated by the Syntax and higher Morphophonemics (except in the special case of the Ideophone - see App. E) is finally reduced to two moras: there is no Phonemic difference between:

⟨ -a'a ⟩ = (-A) + (O) or (Y)

⟨ aa ⟩ = (AA)

and ⟨ aa ⟩ = (A) + (A) + (A)

1.6 The Presentation of Texts and Examples

The form in which Bisa material is presented by way of exemplification in the present thesis needs a little further

The full form of an example cited in a section of description has a reference-number, a source-reference, and four lines of example. The reference number distinguishes between several examples appended to a single numbered paragraph; it does not appear, therefore, if there is only one example in any such paragraph, and reference to an example from elsewhere in the thesis will necessitate paragraph-number as well as example-reference: the numbers do not run serially throughout the thesis as this has not been found to be a convenient system. The source-reference is normally a reference to a text of the corpus: occasionally to conversations recorded on tape ("taped conv.") or longhand ("written conv."), or to elicited items ("elic.") [1]. The texts are referred to by the two-letter code (from AA to BH) of the input for computer processing, followed by a three-digit code representing the serial order within the text of the punched card containing the example: by this means the texts are divided into equal (75-character) sections whose boundaries (except text-initially and-finally) have no linguistic significance. The four lines of example consist of [2] :-

1) A syntactic analysis with composite symbols (form/function formulae - see 1.4.3.5 p.47f. above) above the appropriate parts of the second line (see below). The first line is itself sometimes broken down into several layers where recursion (1.4.3.4 above, p.46f.) occurs and is relevant to the point at issue, or where information at several Ranks is needed.

2) A Reading-Transcription[3] presentation of the piece of data illustrating the point in question (the example proper).

3) The Gloss which gives rough Morpheme-for-Morpheme correspondents in English, retaining the linear order and punctuation of the Bisa R.T. (line 2). Special conventions of the Glosses in this thesis are:-

i) Where the correspondent is a syntactic description rather than a Gloss this is enclosed in parentheses (e.g. "(neg.)" contrast "not").

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[1] Structures are not accepted as grammatical on the strength of non-text data alone, but sometimes the text does not yield the most isolable and unequivocal example for illustrative purposes.

[2] A sample of the full format is presented p. 77 below.

[3] See 1.5.3 pp. 72-75 above.

SAMPLE OF EXEMPLIFICATION FORMAT:

1.6.1.....

. . .

Examples:-

3 1. | 2 NP.Cstr(M) | NW(H) |
| 1 NP(S) | sf | NP(O) | VP(PD)

4 ℓ Ko naa nyinbonno noon miiyaa bri gwaa sa-le'y,
5 country this girls(6xii) those eye(6ij) not(6xi) man take-will'(neg.)(6i)
7 "The girls round here won't look at a fellow.

8 { sf | NP(S) | sf | NP(O) | VP(PD) | NP(IO)
ℓ k ' ibii (6vii) ' y'i (6x 6viii) ka-le (6xi) ma
that'you are'self call-ing to
"if you are chatting them up

8 { NP(S) | sf | VP(PD) | NP(IO) | NP(CP)
ℓ ni ' n (6iii) diga-l'a miŋa ma kir. ℓ AE003 [9]
they'+ look-will they self at chief
" they regard themselves as chiefs !"

NOTES:

1. Clause-Rank syntactic formulae.
2. Second-layer Syntax - structure of first NP(S) .
3. Reference number of example.
4. Example proper - Bisa in Reading Transcription.
5. Gloss.
6. Special Glosses as described on pp.76,78 .
7. Translation.
8. Overflow of long example.
9. Source-reference (cf. p. 76).

ii) Where a single-Word English correspondent cannot be found for a Bisa Morpheme a Phrase may be used without spaces or punctuation (e.g. "notexist" for Bisa /ba/ = (BA2) which means to be non-existent or absent).

iii) The Morpheme (N5) - SF of sequential Sentence construction (3.1.2 below) is glossed "+"

iv) (Y) when used as Interrogative-marker is glossed "?"

v) (RAA)/(KOO2)/(GE1) the Question-marker is glossed "eh?"

vi) Non-Bisa words are glossed with non-English: where possible American will be used for glossing French or English loans (modern 'slang'), French to gloss Hausa and Moré (trade languages) and Latin for Arabic (religious and Philosophical terms).

vii) (K) is glossed "that" : this particle has such a wide range of uses that no gloss could reflect them all.

viii) Where a Pronoun functioning as NP(O) has the same referent as the NP(S) this "reflexive" is glossed "self" (this is basically not syntactically significant, but many verbs have a different meaning with a "reflexive" object).

ix) (N2) the "copula" SF of a Nominal Clause is glossed with the appropriate part of the Verb "to be".

x) The verb "to be" is also used to gloss the continuous particle (YI3). This is distinguishable as it yields an auxiliary in the finished Gloss or translation ("is coming" etc.).

xi) The Non-Past verbal Suffix (-LE1)/(-N1) is glossed "will" unless preceded by (YI3) in which case it is glossed "-ing".

xii) The Nominal plural Suffix (-RO) is glossed by the appropriate English plural form.

4) The Translation into a natural English utterance. Where the Bisa is idiomatic or has very different lexical or syntactic structure from English, this may be quite difficult to reconcile with the "literal" Gloss in line 3. The translation of each example is worked out for that particular item. It may be different in detail from that given for the same item where it is part of a fuller context in another example or in the full text in the Appendix. The Translation is enclosed in Quotation Marks - " ".

These four lines are not always given in full. In cases of simpler Syntax, of lower Ranks, and where the "parts of speech" of the English Gloss give a fair characterization of the structure, the first line is omitted. Moreover where the Translation can be fairly easily correlated with the Bisa, the Gloss may be omitted.

In cases where the example may be of a length to occupy more than a line of the printed page, the 'overflow' parts of the lines will be given below the initial sections.

Selection of examples is designed to exclude as far as possible problematic material other than the specific point to be exemplified. In order to focus attention on the question illustrated the examples are kept as short as possible, especially if the context is to be found in the complete texts in the Appendix (B[1] - where the most-cited texts are reproduced in R.T.). Where it is necessary to give a more extended context or where a SF or other relational item is the focus of the example, the item in question may be underlined in the Bisa and the Gloss (and perhaps in line 1 as well).

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[1] Text AJ is also reproduced in Appendix A in Phonemic, Morphemic and Reading Transcriptions.

CHAPTER 2 - SYNTAX ABOVE THE SENTENCE

2.1 - Status of Higher Ranks:

It is a basic part of the Syntagmatic model that syntactic structure is present in the most extensive stretches of speech: - the hierarchy of Ranks continues 'upwards' to the Discourse. Studies in the higher Ranks in various languages[1] have shown that there is structuring in a Narrative or Conversation just as in a Phrase or Sentence. Analytical description of Ranks above the Sentence does, however, present practical problems of its own. By far the most serious of these is the sheer quantity of material involved. Because the physical size of the Units is greater, there will be fewer examples of such Units in a corpus of a given size. There is also normally a rich variety of intersecting Classes and Types of Unit at these Ranks. Consequently a considerably more-extensive corpus is necessary to provide an adequate sample for the study of these higher regions of the Syntactic Hierarchy.

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1 Sango in Taber, 1967: Nomatsiguenga in Wise, 1968: various languages of the Philippines in Longacre, 1968 and of New Guinea in Longacre, 1972.

In practice, therefore, an initial description of a language is often restricted to Ranks up to, and perhaps including, the Sentence. Further research may then yield a second-stage description which treats in detail of the higher Ranks. The present study of Bisa is an initial description of the abovementioned type, in which Ranks above the Sentence will not be discussed in detail. It is, however, desirable to give a rough sketch of the patternings of the higher Syntax for two reasons. First, the Discourse-structures of the Texts from which the examples of the lower Units are drawn form a background against which these items can more readily be understood: this is particularly the case with the interchange of speakers in Conversational material. The second reason is that the functional or distributional aspect of the Sentence, and of Units of lower Ranks which have featural functions above the Sentence, cannot be described unless some idea is given of the structuring of the Ranks at which these functions apply.

This Chapter, then, forms a sketch of the Syntax of Bisa above the Rank of Sentence. It is designed to provide some background for the discussion of the Sentence in Chapter 3, and will serve to indicate some of the characteristics of the Bisa Discourse from which the examples throughout are drawn.

The drawback of a description of this sort - limited, in so far as systematic and complete treatment is concerned, to the Ranks of Sentence and below - is that it will not be possible to provide an exhaustive analysis of any

sample of the language. The analysis of the Sentence structures will leave a considerable number of items which will ultimately be accounted for as features of supra-Sentence structure or function (see 1.4.3.3, pp. 33 ff.) and which therefore have no place in the description of Ranks up to the Sentence. As a solution to this problem we have adopted here an approach which was used at a stage in the development of grammatical research when Units above the Sentence were not being handled - that is to say, using a distinction between "Major" and "Minor" Sentences (c.f., e.g., Bowman, 1966). The Major Sentences are those which have a structure described in terms of Clauses (and Syntagmatic Features) and so down through the Ranks. The Minor Sentences comprise all the remainder of the material in the Corpus - exclamations, hesitations, items such as 'Yes' and 'No', particles functioning at higher Ranks, and so on. Each of these categories may not seem individually very important, but together they make up not a negligable proportion of any sample of Bisa.

2.2 - Discourse Rank

The term "Discourse" is often used loosely for the whole area of Syntax above the Sentence, but it is more specifically defined as the highest Rank in linguistic structuring. A Discourse is a whole piece of language-

-behaviour not functioning in any more-inclusive linguistic whole. Thus it might be anything from a single greeting given in passing to a conversation lasting many hours, or a lecture with attendant questions and answers. In contrast "Utterance" refers to a single contribution of one speaker, bounded by utterances of other speakers or by silence - thus a sermon or lecture would be a single Utterance, while a conversation is structured from many Utterances of different interlocutors.

2.2.1 - Discourse Function:

The Discourse - defined as above as the highest linguistic Rank - has no statable linguistic function. It is often of interest, however, to characterise the function of a discourse in the context of "situation" (Firth's term) or "behavior" (Pike's - see 1967, title). Thus Discourses might be classed as Edification, Functional (part of everyday activity - farming, bargaining, etc.: cf. Malinowski, 1935), Entertainment, Religious, Magical, Social ("phatic communion" - Malinowski, 1923) and other similar categories. In some languages the markers of these Classes of discourse might be syntactic or even phonological features - for instance archaic second person singular pronouns in Religious Discourse in European languages, pedantic syntax and vocabulary in Edification (sermons and lectures), phonological shift ("funny voice") used for magical incantations or in Discourse intended solely as entertainment. This is not, however, noticeable in the Bisa material on which the present study is based.

2.2.2 - Discourse Structure:

There seems to be a very general tendency for the first degree of delicacy in the analysis of Discourse to show a structure:

F.1 Disc. = + Introduction + Content + Conclusion

- This may not seem a very exciting statement, it might indeed appear tautologous. It should be realized, however, that this type of patterning is not characteristic of lower Ranks like Word, Phrase or Clause. In some Types of Discourse there may be a finer-grained structure involving a Specific Introduction and Conclusion alongside the Formal ones (cf. Taber, 1967, p.80), and more complexity is common in the Content section.

There is in Bisa the usual sort of range of Discourse Types, though these are more often distinguished by Syntagmatic Features than by differentia of Elemental structure: these SFs include[1] Selection of Content items, Particles as markers, and Selection of theme-setting Aspect and Tense[2] in introductory Clauses - Habitual for Process-description, Past-Continuous for Fable or Puzzle-Story.

The major cleavage of Discourse-Types in Bisa is between the "Solo" where one interlocutor is the major or only speaker, other persons being in some sense 'audience', and the "Interchange" to which the

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[1] General treatment of SFs, see pp. 33-45

[2] Discussion of Tense/Aspect see 4.5.5/6, pp.163 f.

contribution of two or more interlocutors is intrinsic. Sub-Types observed in the Corpus on which this study is based are:

Type I - Solo Discourse:		Examples[1]
I.i	- Fable Narrative	(AQ, AS etc.)
I.ii	- Historical Narrative	AB, AF, (AO etc.)
I.iii	- Autobiography	AA, AD, AE, AI, (etc.)
I.iv	- Process Description	AC, AH
I.v	- Song	(in AS, in AT, T.12,&c.)
I.vi	- Re-enactment	(BE)
(I.vii	- Letter-writing)	AG

Type II - Interchange Discourse:		
II.i	- Social/Greeting	(AY, C.1-10,T.41 etc.)
II.ii	- Conversation: 1) Functional	(C.Z, etc.)
	2) Leisure	AX, (BA etc.)
II.iii	- Puzzle-Story	AJ, (AJ,AL,AM etc.)
II.iv	- Riddle-Session	(BB)

2.2.3 - Discourse Systems:

There are really no categories which have the whole Discourse as domain. Every syntactic System can be represented by several of its different terms within a single Discourse. There is, however, a 'suprasegmental' characteristic of Discourse which seems best treated in a comparable way to the categorial Systems of lower Ranks

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[1] Text reference system see p. 76. Texts not reproduced in Appendix A.3 or B are given here in parentheses.

- that of Formality. This is in fact a set of intersecting categories, which differ from true Systems, however, in that they are scales of cline form rather than separate alternative choices. The major pair of such categories are Fluency, ranging from Fluent to Hesitant, and Intensity, ranging from Neutral to Intense. Formal Discourse, Fluent and Neutral, is Abercrombie's "Prose" (1.3.3, p.19 and ref.). From this extreme, Discourse can become more Intense while remaining Fluent, or more Hesitant while remaining Neutral, until the other extreme of Informal Discourse is reached with a high degree of both Intensity and Hesitation. Formal Discourse is the 'unmarked' term generated by the basic syntax of this description. Increasing Intensity is marked by increased use of Exclamations (3.2.2), Ideophones (Appendix E), and exaggerated voice-pitch. Increasing Hesitation is marked by use of some or all of the features of Breaking - insertion of pauses and indeterminate vowels and nasals, Repetition - of whole syntactic Units, Staccato - Repetition which paraphrases the repeated item rather than replicating it, Stutter - repetition of a fragment which is not a Unit, and Interruption - invasion of an Utterance of one interlocutor by speech of another in a way contrary to the normal syntax of the Interchange.[1]

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1 See 3.2.4, p.127

2.2.4 - Discourse Examples:

The factors which make Discourse analysis problematic also militate against the citation of examples to illustrate this Rank. Reference to the Texts reproduced in Appendix A.3, B which give examples of the Types has been given above, p.85. We give below examples of the various features which mark the Intensity and Fluency Systems' :-

1. Fluent-Intense (exclamation and raised pitch):

/ Kay ! ibii nwaari ba ! / AW009
(excl.) you lie do

"Blimey, you're lying ! "

2. Hesitant - Intense (staccato-exclamations):

/ Ah ! panni a paŋa, panni kaŋida siin ! / AJ014
(excl) thread it strong, thread tough (excl.)

" Ah, a thread is strong - a thread is tough indeed ! "

3. Hesitant - Neutral (stutter/repetitions)

/ a n - a' - a n getiga si n. / AN004
he + - he' - he + mirror bought with

"And he - he - and he bought a mirror with it."

4. Hesitant- Neutral (staccato):

/ a n bor hina'a - ko naa' - Kusaa ko naa' / AN029
he + came thingummy'to - country thisto' -
Kusasi country thisto'

" And came to whatsit - this area - this
Kusasi area."

5. Hesitant - Neutral (breaking):

/ Bi koo (pause) eer (pause) gwaa ... / AN022
the eh? ..... er ..... the man ...

Kaasim: (hunting for answer) "Is this it...er...
the man ...?"

6. Fluent-Neutral:

/ Bi gwaa k'a peen sa a n pi bi wosi n a n gasu bi?/
whatabout man that'he knife took he + water the cut
with he + enter the AJ020

"What about the man who took a knife to cut the
water with and went in?"

2.3 - Section Rank:

The area whose analysis is least clear at the present state of researches is that between the Paragraph and the Discourse. It seems most probable that there is one Rank which has a structure stated in terms of Elements whose exponents are Paragraphs and which functions in the Discourse. The Discourse Sections, such as "Introduction" and so on, are the Units at this Rank. It is possible that it might prove necessary to postulate a further Rank between Section and Paragraph - decision is not possible at this stage because the high degree of recursion in these areas obscures the basic structuring until a broad-based and detailed analysis can be carried out.

2.3.1 - Section Function:

These Discourse Sections ("Episode" has been used for a Rank of this nature, but seems to imply only a Narrative Type of Discourse) function as Elements of Discourse structure. Besides the functions "Formal Introduction", "Specific Intro.", "Conclusion", "Formal Close" it is probable that the nuclear function indicated as "Content" in F.1 (p. 84) will prove amenable to analysis into several functions, differing in different Discourse Types. These functions are marked mainly by linear order and selection of constituent Paragraphs, though some Particles may function at this Rank (see 3.2.1, p. 119).

2.3.2 - Section Structure:

Section is a Rank where the structural possibilities correlate with the functions. Formal Introduction, for instance, has a structure of Greeting-interchanges. The different Content Elements of various Discourse Types are represented by Background/Action, Development, Explication, Summary/List and similar Types of Section. Some Sections may be very long - the Development Type having a Nucleus of any number of Narrative Paragraphs: others will be quite short - the Formal Close, and the Introduction in non-Narrative Discourse, have few options for expansion. The Types are mainly marked by order and selection of Paragraphs as constituents. Some choices at lower Ranks and some Particles (3.2.1,p.119) may also be relevant.

2.4 - Paragraph Rank:

2.4.1 - Paragraph Function:

The Paragraph functions in the Section. In a Formal Introduction Section it will be a greeting-interchange functioning as Welcome, Health-Enquiry, or Communion: in other Types its functions will be Background, Action, Cause, Effect, List-Item, Summary, Lead-In, Development and similar. These functions are marked by the selection of Paragraph-Type, and in some cases of its constituents (e.g. Nominal Clause in a Narrative marks Background); in some cases linear order and Particles will also be relevant.

2.4.2 - Paragraph Structure:

The structure of a Paragraph is stated in terms of Sentences. There are two major Types of Paragraph - the Narrative Paragraph and the Interchange Paragraph. The former has a structure of an optional Narrative-Ground (one or two Sentences) followed by an obligatory Main Action followed optionally by one or more Sequential Sentences, marked by the Particle (N 5) following the NP(S) of the main Clause.

F.1 NarPar = $\pm$ GdSent(NarrGD) + Sent(MnAc) $\pm$ (Sent(SEQ))^{n}

A variant of this Type is the Narrative-Quotational Paragraph which adds quoted speech - anything from a single Utterance to a whole Conversation:

F.2 NarQotPar =

$$\pm \text{GdSent(GD)} \quad \pm \text{Sent(MnAc)} \quad \pm \text{Sent(SEQ)} + (\text{QuotSent(QT)})^{n} \pm \text{Sent(SEQ)}^{n}$$

The Interchange Paragraph has a range of structures of of the general basic form:

F.3 Inter.Par =

$$+\text{Sent(INIT)} \pm (\text{QrSent(QER)} + \text{Sent(REP)}) + \text{Sent(RESP)} \pm (\text{QrSent(QER)} + \text{Sent(REP)})$$

- the basic nucleus is an Initiation and Response, but each may be queried by the interlocutor and repeated verbatim, in part, or in paraphrase, by the original speaker. The Initiation may be a Statement, Interrogation, Question or Command. The Response is a reply, an answer, an affirmation or dissent, and occasionally a non-linguistic reaction (obedience to a command), though this is usually accompanied by a spoken response.

2.4.3 - Paragraph Examples:

1. Sent(MnAc) - Sent(SEQ)

/ Diini 'nyintiin ba. Besa n bor, a n gasu a kar-yaa 'w
one '+ sleep did. termite + came, they + enter his anus-hole 'in

(Sent(SEQ) ctd.)

a n pika. / AM009
they + nested

" One lay down, and termites came and nested in his arse-hole."

2. GdSent (Nar.GD)

/Lu-ban gusi-le min zaa n'i ze-le k'a pi bi kwisi...
woman-crone age-ing palaver owner +'is come-ing that'she water the draw...

Devel.Sent(MainAction)

/K'a n ta k'a nyintaa bo'w a nyi bi yi,
that'she + go that'she sand takeout'of she child the saw

Sent.(SEQ)

/A n a boota, a n a zor firinn...a doo n. /
she + him dugout, she + him washed zot...she gohome with.

ATO05/9

" A trouble-making old woman was coming to draw water. When she went to get some sand she saw the child. She dug him out, washed him off, and .....took him home."

Narrative Quotation Paragraph:

3. GdSent(Narr.GD)

/Yerfoni gi ... goota a n yirba da.
rabbit dog ... stay he + twisting drop

Sent(MnAc)

/ A n bor par'o bo'o, a n a mii ka, a n bonser
he + came house'to the'to, he + his sniff gave, he + billygoat's

(Sent(MnAc) ctd.) QuotSent(QT)[1]

/ gii ma, a n laaka da. A wu "Bo n'i ke bo'o ge?"
stink heard, he + question drop. He say what +'is room the'in eh?

QuotSent(QT)[2] QuotSent(QT)[3]

/ Bonser a w'awo n'i ke naa'w. A w' "A lo ge?"
billygoat he say'he +'is room this'in. He say'it how eh?

QuotSent(QT)[4] QuotSent(QT)[5]

/ A w' "Ah !..." A gin a w' " ..."
he say ah .... he stand he say ...

Sent.(SEQ) Sent(SEQ)

/ Yerfoni gi n fo gongu ke-le bi ma. A n bo. / AN010/6
rabbit dog + thing remove room-mouth the from. he + wentout

(e.g. 3 ctd.) "A rabbit-dog was wandering about. He came to the house and sniffed about. Smelling the billy-goat he asked "Who's in this hut?" Billygoat said it was him. He said 'What's up then?'. He said ' Ah ! ... ' . (Dog) upped and said ' ... ' So rabbit-dog opened up the hut. Billy-goat came out. "

- Interchange Paragraph:

4. InterrogativeSent(INIT)

/David Isa: Bi gwaa k'a panni sa a ... n a daarko pi bi la bi?

DI: whatabout man that'he thread took he ... + it stretch water the ove the?

Sent (RESP)

/ Kaasim: Bila a panni bi paŋa n./ AJO11

K.: cross he thread the power by

DI: "What about the man who stretched a thread... over the water?"

K: "He crossed by the strength of the thread."

5. Interr,Sent(INIT) | QrSent(QER)

/ Hamiidu: Kale ibii diga a zaa tunto'w? - K.: Naa raa?
which you look its owner tried'at? This eh?

Sent(REP) | Sent(RESP)

/ H.: Mhmm. - K.: ... Bo yi goota .../ ARO08
yes ...theone is stayed...

H.: "Which one made the best effort?"

K.: "Is that (the puzzle)?"

H.: " Mhmm."

K.: " ... The one who stayed ..."

6. | InterrogativeSent(INIT) |

/ H.: Bi pidga-no boo', kale ibii diga ma a zaa leda so'y?
whatabout two-s thes', which you look at its owner excel also'(?)

| Sent(RESP) | | QrSent(QER) |

/ K.: N kwaay a ga ko siin. - H.: A ga n a ko n'i?
they all self equal together indeed
self equal they do together is(?)

| Sent(REP) |

/ K.: Mmm. / AROll
yes

H.: " But of those two, which one do you think was best?"

K.: " They are both the same."

H.: " They're both the same, is it?"

K.: " Mmm ! "

CHAPTER 3 - THE SENTENCE

It has already been explained that in this presentation the Sentence is taken as the highest Rank of the syntactic hierarchy of Bisa to be fully analysed and described (2.1,p.80) The functions of the Sentence can therefore not be formally presented, not yet any features of Sentences which are only accounted for at higher Ranks.

Sentences also function recursively in various ways. The Rank-shifted Sentence (p.46) functions as an Element of Sentences as detailed 3.1.3 below. The Sentence-Construct (p.46) functions as Topic in Nominal Clauses of Type V (4.4.1.5, p. 141) and as Complement in Verbal Clauses of Type IV (4.4.2.4, p.149). There is also a Sentence-Construct function as Head of a Nominal Phrase of

Types I.iii.2 and III, and as Relative in the Specific Qualifier of NP Type II.i (5.3.2/3, pp. 176 ff.). There is no special restriction or modification on the Sentence structures in these recursive functions, except that the Modality System choice (3.1.4.1) for the Constructs in the NP must be Statement. The Relative is almost invariably, and the Construct in the Clause is often, marked with the initial Particle (K). The SF of NP Type III is the Particle (BO 4).

We distinguish two general Types of Sentence, the Major Sentence which has a structure of Elements represented by Clauses in accordance with the regular hierarchical pattern, and the Minor Sentence which comprises all the residue of the material in the Corpus after the Major Sentences are analysed (cf. pp. 80 ff. above).

3.1 - The Major Sentence:

3.1.1 - Major Sentence Structure - Types:

The Major Sentence has a structure stated in terms of Elements which are normally represented by Clauses. Sentence-Elements may also be represented by Clause-Sequence Expressions (3.1.2) or by recursively-functioning Sentences (3.1.3). There are four structural Types of Major Sentence which will be described in detail in the following sections.

3.1.1.1 - Major Sentence Type I - The Development Sentence: The Development Sentence is by far the most common Type (92%[1] of the Sentences in the Corpus). It presents either a temporal or a logical development of the action or argument.

3.1.1.1.1- - Elements: The Elements are a Base, a Precedent (PCDT) and a Final (FIN).

3.1.1.1.2 - Syntagmatic Features: a) The obligatory Base[2] is optionally preceded by a Precedent and optionally followed by a Final. In fact, over 2/3 of the Development Sentences are of minimal form - a single Base Clause - so that the Sentence Rank in Bisa is an ill-formed Rank (1.4.3.4, p.46).

b) The Precedent is marked by the Particle (K) which occurs Clause-initially[3], or (much less frequently) by initial Particles (BA 4) or (BO 3). Clauses marked with (K) and (BO 3) ay, and those with (BA 4) must, be marked with an additional Clause-final (BI 2). The Precedent with (K) has the sense of "when" or "if" - the former more often if the Tense is Past, the latter if Non-Past (4.5.5, p.163). With (BA 4) the meaning is usually

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1 The figures here are less precise than those given in later Chapters because of indeterminacy of some boundaries at Sentence Rank.

2 A Clause normally functions as Base, but Cl.-Expression or recursive Sent. are possible (3.1.3): so throughout 3.1.1.

3 Except with Focal Clause - see 4.5.4, p. 161.

"because" or "when", and (BO3) has a sense of "while" or "seeing that...".

c) The Final is marked by initial (K)[1] and optional final (BI2). Its usual meaning is purpose, result, or desire.

3.1.1.1.3 - Formula: (formulaic conventions: pp.47 ff.)

F.1 Maj.Sent.I - Devel.Sent. =
± Cl.[1](PCDT) + Cl.(BASE) ± Cl.(FIN)

3.1.1.1.4 - Examples:

Minimal form - Cl.(BASE) :

1. // A ma . // - it ripened - "It is ready." AC002

2. // Sara-baa bi miŋa. // - "It was good fun!" AB004
play-ment the good

3. // Diga ! // - "Look !" AX012

4. // Moo bor Sukur Wuriyaŋa naa'w. // AA001
I come school Wuriyanga this'to
" I come to Wuriyanga School here."

Cl.(PCDT) - Cl.(BASE):

5. SF- N.Cl.(PCDT) -SF | N.Cl.(BASE)
// K'a n yi bo'o so bi, gita-re n so. // AY033
that'he + is the'in also big-ish is also
"When he is here he, too, is an elder."

---

[1] Strictly "{Cl. / Cl.Sq.Ex. / Sent.Cstr}" - and so throughout 3.1.1.1-4 (see 3.1.3)

6. SF - V.Cl.(PCDT) | V.Cl.(BASE)

/ Kun[1] bee bi ma, | n a zinze la. / AC004

that beer the ripened, they it scrape off

"When the beer is ready they scrape off (the foam.)"

7. SF - N.Cl.(PCDT) | V.Cl.(BASE)

/ Kun gwaa gita-re, ...min gita-re ta'w sa. / AY038

that man (is) big-ish,...word big-ish exist'in also

"If a man is an elder he should have an elder's speech."

8. SF- V.Cl.(PCDT) | V.Cl.(BASE)

/ K 'ibii y'i ka-le ma, ni'n diga-l'a miŋa ma kir./

that'you are'self search-ing for AE002

they'+ look-ing'their self at chief

"If you are after them (girls) they look on themselves as chiefs."

9. SF- V.Cl.(PCDT) | V.Cl.(BASE)

/ Ku'n ya ka busoo bi ma, ni'n busoo bi yi. / AN004

that'they self search money the for, they'+ money the got

"When they had tried to get some money they did get it."

10. SF-V.Cl(PCDT)-SF | - V.Cl.(BASE)

/ Ba a bor bi, a n bor n . / AS017

when he came (sf.), he + came (her) with

"When he came he brought her."

11. SF - V.Cl.(PCDT) -SF) | N.Cl.(BASE)

/ Ba a n kiri'n bi, a guta . / AX010

when he + chief'is (sf.), he big

"Since he is a chief, he is a great man."

---

[1] Allomorphs of (K) see 8.2.5.2; Gloss see p.78, vii .

12. SF-V.Cl.(PCDT)-SF | N.Cl.(BASE)

/ Bo woo nyinta bi, | kin-no woo n. / AX113

as we sat (sf.), | chief-s we were

"While we were there, we were chiefs."

Cl.(BASE) - Cl.(FIN):

13. V.Cl.(BASE) - SF- V.Cl.(FIN)

/ I tor ka ! ku'm a ka ibii'w . / AV022

your ear give that'I it give you'to

"Shut up ! so that I can give it to you."

14. V.Cl.(BASE) - SF- V.Cl.(FIN)

/ Awo le ta fobile ma, k 'a ya a zu. / AQ005

he mouth exist thing-eat-ing for, that'he it throwaway

"He wanted some food to throw it away."

15. N.Cl.(BASE) -SF- V.Cl.(FINAL)

/ Moo yi naa'w ku'm laaka da awo laafi ma./ AG002

I am this'at that'I question drop your health for

"I am here to ask after your health."

16. VCl(BASE)-SF- V.Cl.(FINAL) -SF

/ Ni' ta k ' a ya sara bi ze bi. / AU006

they+' go that'they go play the hit (sf.)

"They went to have the party."

17. V.Cl.(BASE) | -SF- V.Cl.(FIN) -SF

/ A mini'n nwa moo ma so, | ku' moo yi naa' bi./ BG013

his eye'+ love me for also, | that'he me saw this'at(SF)

"His eye loved me, to see me here."

Cl.(PCDT) - Cl.(BASE) - Cl.(FIN):

18. SF- V.Cl.(PCDT) | VCl(BASE) SF- V.Cl.(FINAL) -SF

/Ku'nyi kaaku ten b'a ku, | ni'n ta k'a ya sara bi ze bi./

that'date 3 time came'it reach, | they'+ go that'they

"When the appointed 3rd. day arrived they went to have the party."

19. NP(S).Foc.[1] - SF - VC1(PCDT) | VC1(BASE)[juss.][2] | SF-V.C1(FIN)

/Fo niŋa k 'a n i le 'w,...k'ibii n a pi...k'a n a ma./

thing other that'it is your mouth in... AYO34/5

that'you it say,.that'he it hear.

"If you have something else to say you should say it so that he can hear."

20. SF-VC1(PCDT) | NP(S)[foc.] V.C1(BASE)[juss.]-SF- V.C1.(FIN)

/Bo woo wuti, woo k'oo bor naa'w k 'oo bi diga Wagaduugu ma./

while we gotup, we that'we come this'to that'we come look Ouagadougou at

"When we started out we meant to come and see Ouagadougou."

3.1.1.2 - Major Sentence Type II: Precondition Sentence: The Precondition Sentence is rare, only 11 examples appearing in the Corpus. This Type carries a variety of meanings in which the main Clause is qualified in some way - such as precondition, exception, or contradiction: with translations such as "unless", "if ... not", "but rather", or "only...if".

3.1.1.2.1 - Elements: Precondition, Effect.

3.1.1.2.2 - S.F.s : An obligatory Clause functioning as Effect is normally followed (but may be preceded) by a Clause which functions as Precondition (PRECND) and is marked with initial Particle (SEE).

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1 Focus: see 4.5.4.1, p. 161.

2 Jussive: see 4.5.2 , p.159

3.1.1.2.3 - Formula:

F.2 Maj.Sent.II → Precnd.Sent. =

↓ + Cl.(EFFECT) ± SEE Cl.(PRECND) (or)

3.1.1.2.4 - Examples:

1. ⁄ I yi fer see i wusiga sunsa i a zi ba baaba n.⁄ BA020
you self depart unless you return again
you go work do dad for

"You can only leave (the residential Qur'an School)
if you go back and work for dad."

2. ⁄Awo bi fobile bi-le see go-nyi awo bambara bi-le.⁄
she not thing-eat-ing eat-will AL004
unless tree-child she only eat-will

"She would eat nothing except fruit."

3. ⁄ Ibii bi dama n fon si see ibii n ga.⁄ AM018
you not able + breath receive unless you + die

"You wouldn't be able to breathe - you'd be dead."

3.1.1.3 - Major Sentence Type III - Antithesis Sentence: This Type is even less common (3 examples in Text: others in elicited data). The normal sense is that the antithetic Clause contradicts the thesis or implications of the main Clause.

3.1.1.3.1 - Elements: Thesis, Antithesis (ANTITHS).

3.1.1.3.2 - S.F.s : An obligatory Clause functioning as Thesis is obligatorily followed by a Clause functioning as Antithesis which is marked by the Clause-initial Particle (BAA 1).

3.1.1.3.3 - Formula:

F.3 Maj.Sent.III-Antiths.Sent. =

$$+ {}^{BAA\ 1}\text{Cl.(THESIS)} + \text{Cl.(ANTITHS)}$$

3.1.1.3.4 - Examples:

1. (Kool bor woo par gin'o, baa a n bo pal-le n'i.) A0001
thief came our house night'in, but he + not gothrough house-mouth by''neg.)

"A thief came to our house last night, but he didn't come through the door!"

2. (Mun diin a n a gaa...ke-le bi le, baa a n la bir bi la so'y)
month one he + self lead...room-mouth the toward, but he + not chase goat the away also '(neg.) BC012

"After a month he crept towards the doorway but still he didn't chase the goat away."

3.1.1.4 - Major Sentence Type IV: The Succession Sentence: The succession Sentence is more common than Types II and III, with 31 instances in the Corpus. The meaning is that the fact stated in the main Clause followed (usually chronologically) upon the fact stated in the Antecedent Clause or, if the latter is absent, upon an undefined amount of the preceding context in the Discourse. This normally leads to translations such as "before...", " ...and then ... " .

3.1.1.4.1 - Elements: Successive, Antecedent.

3.1.1.4.2 - S.F.s : a) The obligatory Clause functioning as Successive (SUCC) is obligatorily marked by a preceding Bokale-Clause (see b) below), optionally preceded by a Clause functioning as

Antecedent (ANTECD).

b) The Bokale-Clause has a normal Clause-Unit structure (Verbal Clause[1]) but functions as a SF of this Sentence Type. It comprises a NP(S) and a VP(PD) with the Verb Word (BOKA-LE 1)[2] as Head, and very often the post-Subject Particle (N 5). It does not receive any further Clause-expansions, nor are other Clause-System choices possible - it is always Positive, Assertive, Declarative, Non-Focal[3], Neutral.

3.1.1.4.3 Formula:

F.4 Maj.Sent.IV - Successn.Sent. =

$$\pm \text{Cl.(ANTECD)} + {}^{\text{BokaleCl.}}\ \text{Cl.(SUCC)}$$

3.1.1.4.4 Examples:

1. BokaleCl.(SF) | Cl.(SUCC)

/ A n boka-le | a n nwaa tur. / AV059

he + before-ing he + bull raise

"Then he raised a bull."

2. Cl.(ANTECD) | BokaleCl.(SF) | Cl.(SUCC)

/ La guta bi ba | ni'n boka-le | ni'n dan ze kan diiru boo' ki./ AH004

rain big the did they'+ before-ing they'+ farm hit with cows thes' too

"The heavy rain comes and then they plough the farm with oxen."

---

1 For this, and the following Clause-Rank details see 4.4.2, 4.5.

2 Variant (BAKA-LE 1) : VW Class A.a (6.2.4).

3 And normally Non-Past; there are a few examples of Past.

3. BokaleCl.(SF) | Cl.(SUCC)
/ Kir zinta n baka-le | a n ta'w. / AV046
chief other + before-ing he + exist'in
"Then there was another chief."

3.1.2 - Clause-Sequence Expressions:

While Nominal-Phrase coordination is not very common in Bisa (see 4.4.3 below), the occurrence of an Expression (pp. 46 ff.) of two or more Clauses functioning in Sentence structure in commutation with a single Clause is very frequent. There are three types of link in such Clause-Sequences in Bisa. In each the first Clause of the Sequence establishes the reference of the Subject, and the following Clauses have a co-referent Pronoun as NP(S). The non-initial Clauses do not have any (Focal) expansions before the NP(S). In contrast to similar constructions in other West African languages[1], however, the sequent Clauses may have different NPs(O), Complements, and post-Core Peripheries from those of the initial Clause, though these rarely amount to more than one Phrase per Clause, and the post-Core expansion usually occurs in the last Clause of the Sequence, if at all. The three types of link are:

3.1.2.1 - Narrative Clause-Sequence: The Narrative Clause-Sequence consists of an Initial Clause followed by from one to six Sequent Clauses which are marked by the Particle (N 5) which occurs immediately following the NP(S) of each Clause.

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[1] See, e.g., Pike, 1966, 55 ff., 182 ff.

The meaning is normally a coherent series of successive actions, though logical sequence is occasionally expressed by this construction.

Examples (independent Base Clauses - other functions see 3.1.3):

1. V.Cl.(Init.) | (SF) V.Cl.(Sq.)

/ N a to'w si-pi-ro'w, | ni'n yii-bo da la. / AC006

V.Cl.(Init.) 'in store-water-s'in, they'+ yeast-goo drop in.

"They pour it into big pots and put yeast in it."

2. NCl(Init) | (SF) N.Cl(Sq.)

/ Bir n, | a n'i ke bo'o. / BC010

goat is, it +'is room the'in

"It was a goat, right in the room!"

3. V.Cl.(Init.) | V.Cl.(Sq.)[1] |

/Diini'n dor sa kan se ki, | a n gasu pi bi no n, |

one'+ pot took with fire too, he + enter water the belly to

VCl-(SF)-(Sq.)[2] | (SF) V.Cl.(Sq.)[3] | (SF) V.Cl(Sq)[4] |

/ a n ta, | a n fo-bi-le ba, | a n noon ze, |

he + went, he + thing-eat-ing did, he + plunge hit

VCl-(SF)-(Sq.)[5] | (SF)-V.Cl(Sq.)[6]

/ a n ta, | a n bo gan bi la. / AJ005/7

he + went, he + gothrough foot the on

"One took a pot and some fire, went into the middle of the water, went and cooked a meal, dived in and got through on foot."

3.1.2.2 – Auxiliary Sequence: Clauses which select certain Verb Words as Head of their VP(PD)[1] function as Auxiliary Clauses tied closely to the following Clause in a Sequence-Expression. These Auxiliary Verbs are Classes A.b and C.a of VW which function only in this construction, and Classes E.a, G.a, and L.a which also fulfil general Verb functions[1]. The Sequent Clause often has post-Subject (N5).

Examples:

1. (BA 1) ... (LƆ 4) – do ... how – "manage to...?":

/ Ba a lɔ a n moo nyaso kina'y ? / AX013
did he how he + not me caught thus'(neg./?)

"How come he hasn't caught me yet?"

2. (TOLLI) (BA 1) – "be free to...":

/ Moo n tolli ba m bor... / AV072
I + freedom did I came...

"So I was free to come ... "

3. N.Cl.[NP(TOPIC)-(LƆ 4)] – "What's up with ... that ...?:

/ Zar naa lɔ'ɔ a wo n da maa-maa kina'w'i?/ BD015/6
bean this how'(?) its hand + drop so-so thus'at'(?)

"What's up with these beans that their shoots are drooping like this?"

---

[1] Auxiliaries: (TUU 4), (YA)/(YAR 3), (YUKU), (YUN).
Others: (GƆƆTA); (KA 5), (SA 3) with NP(O) co-reference.
Also (BA 1) with (TOLLI) or (LƆ 4) – e.g. 1, 2;
Nominal Clause with Topic (LƆ 4) – e.g. 3,4.

4. N.Cl [NP(TOP)-(N 2)^{sf}-(LO 4)] - "How is it that...?":

/ A n lɔ a bri ze-n mɔɔ par'o'y? / AX024
he is how he not come-will my house'to'(neg/?)

"How is it that he won't come to my house?"

5. (GƆƆTA) - "stay and...":

/ Lu diin goota, a n wuta, a n a dɛ n yar bi ma./ AR006
woman one stay, she + liedown, she + self care
their man the for

"One wife stayed and lay down to guard their husband('s body)."

6. (KA 5), (SA 3) - "{Look for / Take} it and ...."

a. /N a ka busoo ma, n br'a ka-le i'w./ AX022
they self search money for, they will'it give-will
you'to

"They'll look out some money to give you."

b. / ibii peen sa i pi bi wɔsi n. / AJ010
you knife take you water the cut with

"you cut the water with a knife"

7. (TUU 4) - "be distant and....":

/ Bi n b'a tuu a n a dɛ ... / AX045
this + come'self distanced he + it know...

"He sat over there and knew..."

8. (YA)/(YAR 3) - "... again":

a. / a ya a n a tuu'w. / AX017
he agained he + self left'from

"he came back again from there."

b. / Zinda n a yar a n ta'w. / AW023
another + he agained he + exist'in
"There was another one "

9. (YUKU) - "nearly..." :

/ a n a yuku a n bidama-yaa ku. / AS011
it + self nearlied it + sky-place reached
" it nearly reached to heaven."

10. (YUN) - "go and...", "up and..." (colloquial sense):

/ a yun a n ga / - "he upped and died" AN030
he upped he + died

3.1.2.3 - Quote-Sequence: A Quotative Clause (4.4.2.4, IV.i, p.150) may be preceded by a Quote-Auxiliary Clause[1] to form a Sequence. The Quotative Clause never has the Particle (N5). The Quote-Auxiliary Verbs are listed below, with examples:

Examples:

1. (DO 1) - "know":

/ Ibii do i wu "Kumaasi laatu." / AN026
you know you say Kumasi isfar
" You know that Kumasi is a long way away."

---

1 With Quote-Aux. V.W. - Class C.b/d, L.b (6.2.4) - in VP(PD)

2. (GIN 2) - "up and..." (normal meaning "stand"):

/ Diin gin a wu k'awɔ n nyi yi awɔ bi mii ba-le'y./
one stood she said that'she not child bear ALOO2
she not word do-will'(neg.)

"One upped and said that if she didn't bear a child she would never speak again."

3. (LAR) - "ask"

/ a n a lar a wu k'awɔ bee ... n fir'i.../ AUO32/3
he +them/ask he say that'he not ... is today'(neg.)...

"He asked them if he hadn't been there today..."

4. (PI 2) - "speak"

/ Mɔɔ a pi, mɔɔ wu "Pss ! Yar bi noko." / AWO22
I it speak, I say (excl.) male the excel

"I would say - 'Phew ! The man was best.' "

NOTE:

The Quotative Clause also follows ordinary Auxiliaries (3.1.2.2) (TUU 4) and (YA)/(YAR 3):

5. / Kan-yir bi n a tuu a wu k'a gi bi n suda mɔɔ'w'i '. /
hoe-handle the + self distanced it said BDO20
that'your dog the not bite me'on'(neg.)

"The hoe-handle called over and said 'Don't let your dog bite me ! ' "

6. / A yar a wu "N-tiii, Banka-yamaa..." / ASO33
he agained he said " (excl), Bankayamaa

"Then he sang again 'Yo-ho, Bankayamaa...' "

3.1.3 - Exponents of Sentence-Elements:

One characteristic of Sentence Rank in Bisa is that Clauses to represent Elements may normally be chosen from any Type of Clause and from any of the Clause-Systemic categories. The only limitation in the Corpus which seems statistically significant is that Nominal Clauses are not found as exponents of the Final Element of a Type I Major Sentence, nor of the Succession Element in Type IV. The same restriction applies to the Effect of Type II and both Elements of Type III[1], but the sample is extremely small in these cases.

A considerable amount of recursion is another characteristic of Sentence Rank in Bisa - as in many other languages, cf. Longacre, 1967, 23 ff. . Where the Formulæ 1 - 4 above give "Clause" as exponent of an Element there are almost always parallel examples with a Clause-Sequence (3.1.2) or a recursive Sentence as exponent.

Analysis at this Rank needs, therefore, great care and detailed cross-cutting between considerations of position, exponents, and overt featural markers (especially Particles). In particular, the markers of Narrative Clause-Sequence (N5) and of dependent Elements in Sentences of Type I (K) both have a multiplicity of other functions: (K) is used to mark all sorts of Rank-shifted and recursive Sentences (including Relative in the NP - 5.3.2.1) and also the Jussive term of the Clause-Rank System of Mood (4.5.2); (N 5), while necessary as a marker of Narrative Sequence,

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[1] In Text; but:- /kir n biisi, baa a bi kir do 'y/ -elic.H.7/6
chief is once, but he not chief/still(neg)

is also optionally used to mark other dependent and sequent Clauses at Sentence Rank in addition to functioning as a SF of relations at higher Ranks (3.2.1 below).

Examples:

1. SF- RS.Sentence(PCDT)
[Cl(ANTECD) BokaleCl.(SF) | Cl.(SUCC)]

/ Kun la guta bi ba ni'n boka-le ni'n dan ze kan diiru boo' ki,
that rain big the do they'+ before-ing they'+ farm the hit with cows thes' too

Cl.(BASE)

ni'n fo duu kele. /
they'+ thing sow then AH003

"After the big rains have come they plough the farm with oxen and then sow the grain."

2. SF- Cl.(PCDT) | RS.Sentence (BASE)
[SF-Cl.(PCDT) | Cl.(BASE)]

/Ku 'moo bor , ba a moo lar, moo w' "Ayyh !" / BG019
that'I came, when he me ask, I say'(excl.)

"When I got there, as he asked me I said 'Ayyh !' "

3. SF- Cl.(PCDT) | RS.Sentence^{II}(BASE)...
[Cl.(EFFECT) |

/K'awo n yar sa'y awo bi fo-bi-le bi-le'y
that'she not male take'(neg) she not thing-eat-ing eat-will'(neg)

..,(BASE ctd.)
SF- Cl. (PRECND)]

see go-nyi awo bambara bi-le'y./ AL003
unless tree-child she onliness eat-will'(neg.)

"If she didn't get married she would never eat anything except fruit."

3.1.3 - e.g.4 :

SF- Cl.(PCDT) -SF	excl.	Cl.-Seq.(BASE)	Cl.(FIN)
		[Cl(Init) Cl.(Seq)]	

(Ku'n a ba maa n bi -Hayya- n a fer ni'n ta sara bi ze-le) (AU008/9)

that'they him did thus with (sf) -(excl)- they self left they'+ go play the hit-will

" When they had treated him like this, they left and went to have the party "

e.g. 5: (BC003-6)

Aux.Cl.Seq (ANTECD)		Bok.Cl(SF)
[Cl.(Init)	Cl.(Seq)]	

(diin bi a nyoon-pi si a n a kunta ke'w...a n boka-le

one the his oil-water receive he + it deposit room'in...he + before-will

Rankshifted Development Sentence (SUCC)							
[Rankshifted Development Sentence (BASE)						SF Aux. Cl.Seq.(FIN)	]
[Cl.(BASE)	RS Devel.Sent. (FIN)				SF		
	[Cl(BASE)	SF- Narr.Cl.Seq.(FIN)		Cl(Seq)]		[CL(In.) Cl.(Seq)	]
		[Cl.(Init)					

(kindee a n bo n ta bisu'w k'a ya n a ka fo niŋa ... bi a n mi bi k'a yan a kinka fo koŋi bi ma)

then he + goout + went outside'to that'he go + self search thing other ...the for he + drink

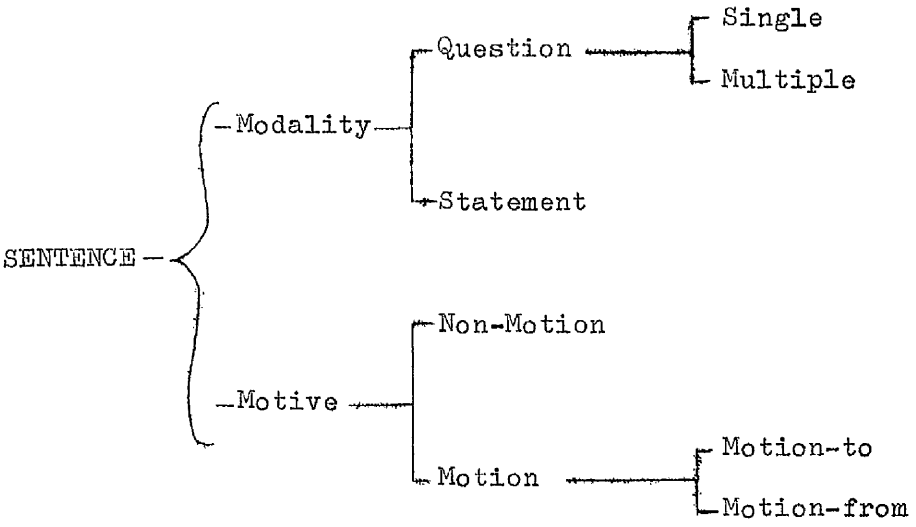
that'he agained he cover thing this the over

" The one took his milk and put it down in a room and then went outside to look for something else ...to drink so that he could cover it up again. "

3.1.4 - Systems of Sentence Rank:

There are two binary Systems cross-classifying at Sentence Rank, each with a binary sub-System entered through one of its terms. The Modality System gives the choice of Statement or Question, and Question may be either Single or Multiple. The Motive System gives the choice of Non-Motion or Motion, the latter yielding a choice of Direction - Motion-to or Motion-from. This may be diagrammed:

SYSTEMIC DIAGRAM 2 - Sentence-Rank Systems



3.1.4.1 - The Modality System: The choices of the Modality System are related semantically to the speaker's choice of giving or seeking information, and syntactically in the structure of Discourse, particularly of the Conversation Type. These functions are partially shared with the Clause-Rank Information System (4.5.1, p.157) - the

Statement corresponding to the Assertive, but Question is Polar - requiring a Yes/No answer[1] - while Interrogation seeks more specific information. Moreover the Modality choice applies to whole Sentences while each Clause has a separate interrogation/assertion choice.

3.1.4.1.1 - Statement: The statement is the unmarked term of the Modality System. Sentences generated by the description in 3.1.1-3 above are Statements.

3.1.4.1.2 - Question: The marked, Question term of the System gives entry to a sub-System contrasting Single Question with Multiple:

3.1.4.1.2.1 - A Single Question is marked by adding Type II Intonation Contour (1.5.3, p.68), or[2] Sentence-final Particles (RAA) or (GE 1) or (KOO 2) or (Y)[3], or both Intonation and Particle, to a Sentence-structure generated by 3.1.1-3.

3.1.4.1.2.2 - The Multiple Question has a Sentence marked with final (GE 1) followed either by a Sentence with final (Y) or by one or two Sentences with initial (GEE) and final (GE 1).

3.1.4.1.2.3 - Reduced Structure is found in that Sentences marked as Questions may undergo deletion of material given or implied in the liguistic context (examples 9, 10, 11).

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1 Or choice of alternative in a Multiple Question.

2 Question marked by Intonation alone is rare.

3 In this order of frequency.

3.1.4.1.3 - Examples:

1. Statement:

/ Lu zaa bi a bɔ'w wa ! / AV094
woman owner the it takeout'at (excl.)
"The one with the wife did best, of course !"

2. Single Question (KOO 2):

/ Lu zaa bi a bɔ'w koo? / (see e.g. 1) AV094
"The one with the wife did best, did he?"

3. Single Question (GE 1):

/ Koo-rɔ nɔɔn ban bɔle-piiya awɔ ni'n bi a n nya
hen-s those about teen-two he +'them ate he + finished

/ baa awɔ bri mii ba-n ge ? / AV067/8
but he not word do-will eh?
"Had he eaten up all those twelve hens and
(the man) wasn't going to say a word?"

4. Single Question (RAA):

/ Mɔɔ n a sa-n m a nɔ ibii kunbir'o raa? / AS024
I + it take-will I it touch your back'on eh?
"Am I going to rub your back with it?"

5. Single Question (Y) :

/ A pi a n a-le a wɔ n ba-le n'i? / AP004
it speak he + do-ing his hand with do-ing with'eh?
"Will he tell him by performing with his hands?"

6. Intonation:

/ I ta i n a bil-le i zi keede? / AX072
you go you + him call-will your father then (?)
"You'll go and call him your 'Father', then?"

- Multiple Question - ...(GE 1) ...(Y) :

7. // Nyiika a ge? - a n nyiika'y? // AX058
wept he eh? - he not wept'(?)
"Did he weep, or didn't he?"

8. // Moy n ge? - fii-yaa n'i? // AX006
rice is eh? - thing-seed is'(?)
"Is it rice, or millet?"

9. Reduced Multiple Question - ...(GE 1),(GEE)...(GE 1):

// La ba ... a n kini'n ge? - gee, besa n gasu ...bi ge?
rain did... it + pass'with eh? - or, termite + enter the eh?

// - gee, zoo n gasu ... bi ge? // AM012/4
or, bee + enter ... the eh?

"The one rain came...and swept away, or the one termites got into..., or the one bees got into...?"

10. Reduced Single Question (GE 1):

// Moo ge ? // - "Who, me?" BA016

11. Reduced Single Question (Intonation):

// Boo-ro? // - "Blind men? "

3.1.4.2 - The Motive System: A Bisa Sentence may be considered globally as either involving motion from place to place[1], or not. If motion is involved, it may be towards the speaker[2] (or some other

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1 But with a few idiomatic and metaphorical uses of 'motion' comparable to English "Now you've been and gone and done done it."; "It came on to rain."

2 In the case of quoted speech, the quoted speaker.

focal location in the immediate situational or linguistic context), or else in some other direction.

3.1.4.2.1 - The Non-Motion Sentence is the unmarked term of the Motive System. It is any grammatical Sentence not marked as indicated below.

3.1.4.2.2 - The Motion Sentence is marked by the selection of a Verb of Motion (VW Classes B, D, F, H - 6.2.4[1]) as Head of the VP(PD), and/or by the marking of one or more of its Clauses by a Motion Auxiliary preceding the Predicate. This Auxiliary is almost obligatory in the case of a Final Clause dependent on a Motion Base Clause in a Type I Sentence. In addition the (K) of the Final may be omitted, in which case the NP(S) of the Final Clause may also be deleted if it is co-referent with the Subject of the preceding Clause. Motion may be:

a) Towards the speaker : Auxiliary (BI 4)

b) In another direction: Auxiliary (A 4)

3.1.4.2.3 - Examples:

Motion-to:

1. // Moo ze-le m bi diga awo ma. // AGOO4[2]
I come-will I come look you at
"I will come to see you."

1 (A 4), (BI 4), (BOR), (BO 2/5), (GASU), (KIN), (KU), (SI 4), (TA 1), (TUU 2), (WUSIGA), (ZE 3) - and others.

2 From a letter: focal point is reader's location.

2. / Bɔ ibii le n ta ma, i bi a si . / AS010
what your mouth + exist for, you come it receive
"Come and take whichever you like."

3. / K'a bor bi, a gin a wu "Ooh ... !" /AU022
that'he came (sf) he stood he said (excl.) ...
"When he came, he upped and said 'Oooh... ! ' "

Motion-from:

4. / N yi ta-n k'a ya[1]a nyinbweere bi biita. /AN009
they are go-ing that'they go their girl the bury
"They were on the way to bury their girl-friend."

5. / N a gin zaa zi . / AV039
they go stand road by
"They went and stood by the road."

6. / A n ta. / - " He went. " AV053

Compare:

7. / ... a n a si, a n a lee ku kir par'o. /BD024
... he + self ran, he + go place reach chief's house'to
"He ran off and arrived at a chief's house."

8. (the same man tells the story to the chief, having arrived)
/ Woo bri-si woo k'oo bi kiibar ka ibii'w. / BD038/9
we dash-ran we that'we come news give you'to
"We ran to come and tell the news to you."

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[1] Allomorphs of (A 4) - see 8.2.4.1

9. Omitted (K) - NP(S):

/ Bir-da kan bikkur-ro ki, n'i ta-n sara_ze gi'w /
goat-female with goat-heifer-s too, AUO14
they'are go-ing play_hit_place'in

"The nanny-goats and kids are going off to have a party."

10. Non-Motion:

/ Leeka n t'a wu, ni'n pawo ze, ni'n se da ma./
start they usually'it make, AHOO1/2
they'+ stubble hit, they'+ fire drop on

"The first thing they do is trim the stubble and burn it off."

3.2 - The Minor Sentence:

There are a number of different types of item without Major Sentence structure which enter, along with the Major Sentences, into the structure of Bisa Discourse at the higher levels.

3.2.1 - High-Rank Particles:

A number of Minor Sentences are Particle which function as markers of structures, functions, boundaries and systems at Ranks above that of Sentence. These are:

(AMMAA)	- "but"	(DEEN)/(DEENINQA)	- "perhaps"
(AN 1)	- "and, but"	(DON)	- "if only"
(BAA 1)	- "but"(see also 3.1.1.3)	(N 5)	- "then" (see also 3.1.2)
(BALA)	- "of course"	(TOO)	- "O.K."
(BI 6)	- "however"	(WA)/(WALLA)	- "indeed"
	(WOTOO) - "although"		

3.2.2 - Exclamations:

Exclamations are features of Discourse-Rank Intensity - 2.2.3, p.86 above. Exclamations[1] in the Corpus (grouped by approximate meaning and function) are :-

3.2.2.1 - Affirmative Particles: - occurring as a whole utterance, or to introduce an utterance, giving a positive answer to an interlocutor's Question, or expressing agreement. In their weakest sense they mark that the speaker is attending and the interlocutor should continue:

/naan/ ; / mmm / (or other nasal, low level pitch); /m̀hmḿ/ (clear low-high pitch step); /eem/, /eheem/ and variants (see also 3.2.2.3); /yym/; (retroflexed click).

3.2.2.2 - Negative Particles: - negative answer to Question request to interlocutor to alter or defend his statement, or introducing a contradiction:

/ ay' /; / ayii / ; / á 'à / (high-low pitch step); / ḿ 'm̀ / (high-low).

3.2.2.3 - Initiative Holders: - indicate that the speaker is about to enter the conversation or intends to continue:

/ mhmm /, / mmm / (mid level pitch); / weel /; / ooo /, /ooh/, etc. ; /eniwee/ ; /yes/ ; / m' /, / hm' / ; / pss' / ; (dental click) ; /eheem/, /heem/, /eem/ etc. (see also 3.2.2.1) /too/ (see also 3.2.1); / he' / .

3.2.2.4 - Emphatics: - indicate a variety of emphatic or surprise reaction to what has been, or will be, said:

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[1] See also 1.5.1.1.4, p.65f. (phonology): Appendix E.2

a) /' kaay' /, /keey' /, /' kyaa' /, /' ka' / and /' a' /; - surprise or disgust at foregoing matter.

b) /' ah /, /' aaa /, /ah' / - surprise or disgust at what is about to be said by the speaker.

c) /haaya' /, /' hay' / - emphasise a particular Clause, or Clause Element (particularly Predicate). The exclamation follows immediately after the emphasised Unit, and breaks the Intonation down-drift (p.68).

d) /siin/ - stresses a Unit of any length, especially a NP ; follows the Unit stressed.

e) /' wa /, /walla/ (see also 3.2.1); /woo/ ; /' yaa /, /iyaa/ - utterance-finally to emphasise the utterance.

3.2.2.5 - Laugh: - a laugh is a response to a joke - a correlation which would have to be dealt with in higher-rank analysis. Several interlocutors including the speaker of the joke may laugh in chorus.

3.2.3 - Greetings:

Greetings function as Formal Introduction to most Types of Discourse (cf. 2.2.2, p. 84). Some Greetings are Units of normal structure at lower Ranks. Others are unanalysable items which may - or in some cases which only - appear in this function. Yet others are isolated Nominal Phrases.

3.2.3.1 - Unit Greetings: Units used as Greetings are either Major Question Sentences (3.1.4.1.2) or Major Statment Sentences which answer such Questions. These are not, of course, Minor Sentences, but are included here for completeness of the treatment of Greetings, under which head they are linked with a number of Minor Types in similar function.

Examples:

1. /Mii-si ba'w'i?/ - "No trouble?" AY007
palaver-any notexist'in'(neg.)(Quest.intonation)

2. /Wusu laafi ka-le./ - "God grant good health."
God health give-will AY008

3. /I ta i par-le zii n ?/ AY002
you go your house-mouth quiet with (Quest. Inton.)
"Was all well when you came out?"

3.2.3.2 - Special Greetings: The items which are only found in Greetings, or are used in a specialised way in this function, are:

/nyasi-nyasi/ - "welcome"

/nan baa/ - "thank you" (for a greeting)

/konkon/, /kondelaa/ - "all right"

/barka/ - "thank you" (for gift, favour)

3.2.3.3 - Nominal Phrases: Nominal Phrases used as Greetings are normally marked with a Relator, the most common being (KAN) ... (KI 1) and (N 3):

Examples:

1. /Kan i ta ki./ - "Welcome (to a visitor)" AX115
   with your coming too

2. /a yiidibeer ki./ - "Good afternoon." AR001
   your afternoon too

3. /Par zii n, wa !/ AX002
   house peace with (excl.)
   "All's well at home, indeed !"

4. /Laafi./ - "Health !" AX002

3.2.4 - Conversational Fragments:

A number of Minor Sentences are fragments of Major Sentences which can be 'rebuilt' in full from material in the immediately-preceding linguistic context (cf. Bowman, 1966, pp.25 ff.. These Conversational Fragments are of three Classes:

3.2.4.1 - Responses: In the Initiation-Response structure of a Conversation, answers to Questions, Queries and Interrogations - and also the Query itself - are particularly likely to be reduced to fragment form, although even in these contexts a Major Sentence is more frequent in Bisa than in, for instance, English conversation.

Examples:

1. // IS: A n a ta-n bite'w, a n'i dan bi wu-le ge?//
he not go go-will mud'on, he +'is farm the work-ing eh?

// AM: - Bite'y? // AX027
mud'(?)

Issaaka: "He won't walk on mud but he works a farm, eh?"

Abdurrahman: - " Mud? " (Query)

2. // IS: A par bi ko la bo n'i? - AM: Kensi n kwaay.//
his house the cover over what with'(?) AX031
- pan (corrugated metal) with all

IS: "What is his house roofed with?"

AM: - "All with pan." (Answer to Interrogation)

3. // Bukari: A bri fo-si bi-le'y? BA004
it not thing-any eat-will'(neg.)

// Sanuna: Ay !
No

// B: Fiigaaa? S.: Fiigaaa toke. //
ever (?) ever atall

Bukari: "Doesn't (the horse) eat anything (else)?"(Quest.)

Sanuna: "No !" (Answer)

B.: "Ever?" (Fragment Query)

S.: "Never at all !" (Fragment Query-Response)

3.2.4.2 - Echoes: In Narrative and Social Greeting texts where one speaker takes a leading initiative one or more of the hearers normally interjects an Echo at frequent intervals to indicate

continued attention. This may be an Exclamation (3.2.2.1) but it may be a repetition of the end of the main speaker's preceding Utterance, in which case the Echo may be a Fragment of a Major Sentence rather than the whole Sentence.

Examples:

1. // Usumaani: A zi ba miŋa - Dahamaani: ...zi ba miŋa.//
he work did good ... work did good
AY011
U: "He has worked well." - D: "...worked well."

2. // U.: A n'i kan wɔɔ ki...mɔɔ zi-baa binke.
he + 'is with us too ... my work-ment place
// D.: ...i zi-baa binke. // AY022/3
your work-ment place

U.: "He has been with us where I work."

D.: "...where you work."

3. // IS: Gwaa yi nyinta ... kan a lu ki.
man is sat ... with his woman too

// Yakuuba: ... kan a lu ki. // AW001
... with his woman too

IS: "There was once a man and his wife."

YA: " ... and his wife. "

3.2.4.3 - Hesitations and Interruptions: Fragmentary Sentences also enter the Corpus through non-fluent Discourse (2. .2, p. 86) - Repetition, Stutter, and Interruption. Where the Interruption comes from outside the group of interlocutors (e.g.1)

it may, perhaps, be regarded as entirely extra-systemic. There are, however, characteristic ways of making and reacting to interruptions in normal conversation (e.g. 2 - 4): it should be noticed, however, that a complete Major Sentence may, in some of these instances, result from ignoring either the interruption (e.g. 3) or the change of speaker (e.g. 4) .

Examples:

1. /(Kaasim: A min guta naa dir go la ... AK003/4
he head big this climb tree up ...

/(O.M.[1]: Busanga, i sooro n !
Busanga, you greeties with

/(K.: ... a min guta k'a dir go la, a min guta naa dir go la.)/
...he head big that'he climb tree up, he big head this climb tree up.

K.: "This Big-Head climbed a tree..."

O.M.[1] : " Busangas, greeties !"

K.: "... when Big-Head climbed a tree, this Big-Head climbed a tree. "

2. /(IS: Gwaa bi to... - AM: A do wa ! a w'a mii bo'w.)/
Man the name ... he know (excl.) he say his eye goout'to AX062

IS: "The man's name... AM: "He jolly well knew that he was dead !"

---

[1] Old Mossi man enters and greets the company in bad Bisa.

3. / U.: K'ibii n a pi... - D.: Ku'moo n a pi.
that'you + it speak...that'I + it speak

/ U.: ...k'a n a ma. / AY035
...that'he + it hear[1]

U.: " You should say it..." - D.: "I should say it."

U.: "...so that he can hear it."

4. / IS: Ammaa guta-baa bi ... -
but big-ment the ...

/ AM: - eh ! a n a ka woo'w. / AX038
(excl.) he + it gave us'to

IS: "But greatness..."

AM: " Ah ! He gave it to us . "

5. / kun bi bee - kun bi bee a ka ... / AN014
that the not - that the not it gave ...

"If he hadn't - if he hadn't brought it about that..."
(Repetition)

6. / a n - a - a n getiga si n. / AN004
he + - he - he + mirror bought with

"And he - he - and he bought a mirror with it."
(Stutter)

3.2.5 - Nominal Phrases:

Isolated Nominal Phrases can result from Reduced Question and from Greeting and Conversational Fragment (3.1.4.1.2.3, 3.2.3.3, 3.2.4 respectively). There remain two other Types

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[1] If the interruption is ignored, this is a Final Clause dependent on Usumaani's previous Utterance as Base.

of Minor Sentence which consist of a single NP :-

3.2.5.1 - Vocatives: The Vocative is usually a Proper-Noun Phrase (5.3.2.2), or else a NP Type II.i whose Head is a kinship term, a title, or a generic name for a class of being (examples 3, 4, 5/6 respectively). It is not common in Bisa (12 instances in the Corpus), but occurs with the normal vocative-function of drawing the attention of a hearer or distinguishing which of several persons the speaker is particularly addressing.

Examples:

1. // Kaasin ! // - "Kaasim !" AT012

2. // Too, Modu, ibii naa yi ... // AX033
O.K., Modu, you this saw
" O.K., Modu, have you seen this ...?"

3. // Ooh ! M na, gwaa naa-duu ku'moo n a sa...// AV043
(excl.) my mother, man this-here that'I + him take...
"Hey, mother, I want to marry this man !"

4. // Kir, ibii no da moo ma ! // AW033
chief, you belly drop me for
"Chief, you've just whetted my appetite !"

5. // Nyinbweere, bor ! // - "Girl, come here !" AS022

6. // A wu "Gi ! Zar naa lo'o ...? // BD004
he said dog bean this how'(?)...
" He said[1] 'Dog ! What's up with these beans...?'"

---

1 -to his dog.

3.2.5.2 - Summaries: There is a Summary or Explication Paragraph structure in which a series of NPs with the same function in successive Sentences are explained or summarised in an isolated NP added at the beginning or the end of the Paragraph. There is a minimal form in which a NP in a single Sentence is similarly explicated.

Examples:

1. // Lanno kaaku-no noon, diin gin a wu "...", diin gin
women three-s those, one stood she said...,one stood

// a wu "...", diin gin a wu "...". // AL002/5
she said ..., one stood she said...

"These three women, one said ' ... ', one said ' ... ',
and one said ' ... ' ."

2. // Boo n, baytir n, piiya . // AP002
blindman is, deafman is, two

"He was both blind and deaf."

3. // Gi bana - gi-no boo' kaaku so. // AV021
dog behold - dog-s thes' three also

"There's dogs - three dogs, too. "

CHAPTER 4 - THE CLAUSE

4.1 - Clause Function:

A characteristic of the relation between Clause and Sentence Ranks in Bisa is that there is little correlation between the various Clause Types and the functional options at the Rank above. The Clause functions in the Sentence as Precedent, Base, or Final (Sentence Type I), Effect or Precondition (Type II), Thesis or Antithesis (Type III) Antecedent or Succession (Type IV) - see 3.1.1 above. It also enters as Initial or Sequent into Clause-Sequence Expressions (3.1.2). In general, it may be stated that any Clause can fill any of these functions, with the

reservations expressed in 3.1.3, p.111. The only specialised functions are those which require the selection of certain specific Verb Words as Heads of the Verbal Phrases functioning as Predicator. The Classes of Clause resulting from these criteria are presented below.

4.2 - Functional Classes of Clause:

4.2.1 - The Quotative Clause:

The Quotative Clause functions as Sequent in a Quote-Sequence Clause Expression (3.1.2.3), and as any of the Elements of the Major Sentence (listed in 4.1 above). It is a Verbal Clause of Type IV.i (p.150).

4.2.2 - The Quote-Auxiliary Clause:

The Quote-Auxiliary Clause functions as Initial in the Quote-Sequence Clause Expression, and as any of the Elements of the Major Sentence. It is a Verbal Clause of Type I (4.4.2, p. 143) with a Quote-Auxiliary Verb (VW Class C.b, C.d, L.b - 6.2.4) as Head of the VP(PD) and without any Peripheral Elements (see 4.3 below).

4.2.3 - The Auxiliary Clause:

The Auxiliary Clause functions as Initial in the Auxiliary Clause-Sequence Expression (3.1.2.2). There are two sub-Classes:

4.2.3.1 - The Pure Auxiliary Clause: Functions only as Auxiliary, and has as Head of its VP(PD) an Auxiliary Verb (VW A.b or C.a).

4.2.3.2 - The Potential Auxiliary Clause: Functions as Auxiliary and as any of the Elements of the Major Sentence (see 4.1). These comprise Verbal Clauses of Type I with Potential Auxiliary Verbs (VW E.a, G.a, L.a), or with with (BA 1) as Head of VP(PD) and either (TOLLI) as NP(O) or (LO 4) as Adjunct, and Nominal Clauses of Type V with (LO 4) as Comment. Examples of all these types are given in 3.1.2.2, p.107 .

4.2.4 - The Bokale-Clause:

The Bokale-Clause functions as a Syntagmatic Feature of the Succession Sentence (Maj.Sent. Type IV - 3.1.1.4) It is a Verbal Clause of Type I with NP(S), (BOKA)[1] as Head of the VP(PD) - almost invariably with Non-Past Suffix (-LE 1) - and no further expansion.

4.2.5 - The Nominal Clause:

The Nominal Clause (4.4.1 below) - apart from the case mentioned in 4.2.3.2 above - functions as all other non-specialised Major-Sentence Elements except Final (Type I), Effect (Type II), and both Elements of Type III. It also functions at any place in the Narrative Clause-Sequence Expression.

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[1] Variant (BAKA-)

4.2.6 - The Verbal Clause:

Apart from the special Types and Functions outlined 4.2.1-4 above, any Verbal Clause (4.4.2) can fill any function in the Major Sentence or the Narrative Clause-Sequence Expression.

4.3 - Clause Structure:

The major distinction of Clause-Rank Structures is that between those which have a Verbal Phrase as Predicator and those which express various existential, equative, and descriptive predications by juxtaposition of items with an optional Copula - a Particle functioning as Syntagmatic Feature. At Clause Rank we recognise within the linearity of the normal formulæ a number of sub-groups of constituents which need to be distinguished because they are referred to as isolable items at some point in the description[1]. At the primary level of delicacy we might combine both the Nominal and the Verbal Types under a single Formula:

F.1 Clause = + CORE ± PERIPHERY

- in which the Core is that which distinguishes the various Types and the Periphery is an optional expansion common to all. The Periphery contains Temporal, Locative and Adjunct items, but the exponents evidenced for the Verbal Clause are much more complex and more

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1 The term "layering" is often used to describe such relationships. The classic discussion is Pittman, 1948; cf. also Longacre, 1964 17 ff.

numerous in terms both of type and of token. In a Nominal Clause the Periphery consists of a Relational (Temporal or Locative) or an Adjunct but not both:

F.2 N.Cl.Perip. = ± NP (RN: TEMP/LOC) ∓ AP(ADJCT)[1]

In the Verbal Clause both types of Relational and the Adjunct can co-occur:

F.3 V.Cl.Perip. = ± NP(LOC) ± NP(TEMP) ± AP(ADJCT)

As the analysis of the Core is specific to each Type, little more can be said about general Clause Structure, and we will proceed to discuss the major Types with their sub-Types in detail.

4.4 - Structural Types of Clause

4.4.1 - The Nominal Clause:

The main Elements of normal N.Cl. structure are a Topic and a Comment. Types I - III have Comment with or without Topic (if absent, the Topic is identified from the linguistic or situational context), while Types IV and V have Topic alone.

4.4.1.1 - The Comment Clause: The general structure of N.Cl. Type I is such that sub-Types may be recognised by a more delicate examination of the correlation of Element options and exponents. We give first the generalised structure:

---

1 ' AP ' = "Adverbial Phrase"

4.4.1.1.1 - Elements: A Topic and a Comment.

4.4.1.1.2 - Syntagmatic Features: An obligatory Nominal or Adjunctive Phrase functioning as Comment is optionally preceded or followed by a NP functioning as Topic. Each Element is optionally preceded or followed by the Copula Particle (N2).

4.4.1.1.3 - Formula:

F.4 N.Cl. I,CORE =

$$+ \left\{\begin{matrix}\text{NP} \\ \text{AdjncP}\end{matrix}\right\}(\text{COMM}) \pm \text{N2} \pm \text{NP(TOP)} \pm \text{N2}$$

4.4.1.1.4 - Sub-Types: The four sub-Types with their Formulæ and examples are:

I.i - Identificational: specifies, identifies, or adds information about, a Topic present in the context:

F.5 N.Cl. I.i = + NP(COMM) + N2 (SF) ± (PERIP)

Examples:

1. ⁄ Nyeesi n. ⁄ - "That's the solution." AJ023
medicine is

2. NP(COMM)-sf-AP(PERIP)
⁄ Gita-re n so. ⁄ - "He is an elder, too." AY033
big-ish is also

I.ii - Demonstrative: acts as a deictic or equative - "this/that is ..." - the Topic being a Demonstrative NP :

F.6 N.Cl. I.ii =

$$+ \text{NP(COMM)} \pm \text{N2 (SF)} + \text{NP}^{\text{II.iii.3}} \text{(TOP)} \pm \text{(PERIP)}$$

Examples:

3. NP(COMM) -sf-DemNP(TOP)

/ Gwaa diin bi n bi . / - "That's one man." AW033
man one the is the

4. NP(COMM)-sf-DemNP(TOP)-AP(PERIP)

/ A n bi so . / BG015
it is the also

"That's it as well."

5. NP(COMM)- DemNP(TOP)

/ A karam bi . / - "That's all." AT012
its completeness the

I.iii - Pronominal - Where a personal Pronoun is Topic, it follows the Comment - which may or may not be followed by (N 2) - and is followed by the Copula:

F.7 N.Cl. I.iii =

+ NP(COMM) ± N 2 (SF) ± NP^{I} (TOP) +N2(SF)±(PERIP)

Examples:

6. NP(COMM)-sf-Pn(TOP)-sf

/ Boo n ibii n / - "You are blind" AP018
blindman are you are

7. NP(COMM) -Pn(TOP)-sf-NP(RN:TEMP - PERIP)

/ a gaasiba ibii n biisi. / AX015
his friend you are longtime

"You've been his friend for ages"

I.iv - Equative: First the Topic is specified, and then an equative, descriptive, or naming Comment is added:

F.8 N.Cl. I.iv =

$$+ NP(TOP) \pm N2(SF) + \left\{\begin{matrix} NP \\ AdjncP \end{matrix}\right\}(COMM) \pm (PERIP)$$

Examples:

8. NP(TOP) | A jncP(COM)
/ Sara-baa bi | miŋa . / - "It was good fun." AB003
play-ment the good

9. NP(TOP) -sf- NP(COMM)
/ Woo zii-da to n Surawini./ AD001
"Our grand-father's name was Surawini."

10. NP(TOP) | NP(COMM)
/ Baaga nyin-no | soor. / - "There were 5 AS010
lion child-ren (were) five lion-cubs."

11. NP(TOP) | AdjncP(COMM) NP(RN-PERIP)
/ moo wo | gweli-gweli kina'w . / AS023
my hand pretty-pretty thus'at
"My hand is so pretty"

4.4.1.2 - Event-Comment Clause: In Type II the Topic is a Sentence-Construct, and it appears at the end of the Clause in apposition to a Clause-initial Pronoun (exactly parallel to the English "It is good that ....") :

4.4.1.2.1 - Elements: Topic Sentence, Comment, Observer, Adjunct.

4.4.1.2.2 - S.F.s : An obligatory Adjunctive Phrase functioning as Comment is obligatorily preceded by a 3rd. person singular Pronoun as marker, and followed by a Sentence Construct functioning as Topic. Between Comment and Topic come optionally a NP functioning as Observer and marked by following Relator (MA 1), followed by a Peripheral Adjunctive Phrase functioning as Adjunct.

4.4.1.2.3 - Formula:

F.9 $N_{o}Cl_{o}$ II =

$$+ {}^{A\,1}\text{AdjncP(COM)} \pm [\text{NP(OBS)}^{MA\,1} + \text{AP(ADJCT)}] + \text{Sent.(TOP)}$$

Examples:

1. sf -AdjncP(COM)-NP(OBS)^{sf} -AP(ADJCT)

/ a nyinta moo ma guta AG001
it sweet me for big

Sent.Cstr.(TOPIC)

/ moo n'i ki naa ba-le ku'm a ka ibii'w/
I +'am paper this do-ing that'I it give you' to

"It is very pleasant for me to be writing you this letter."

2. sf -AdjncP(COM)-Sent.Cstr.(TOP)

/ a miŋa k'i gwaa bor so./ AY015/6
it good that'your man come also

"It's good that your people should come too."

4.4.1.3 - Locative Clause: The Nominal Clause Type III primarily presents the location of the Topic by way of Comment, though some other relational and a few other types of predication occur.

The Copula is (YI 3) :

4.4.1.3.1 - Elements: Topic, Locational Comment, Adjunct Periphery.

4.4.1.3.2 - S.F.s : The obligatory NP functioning as Topic is optionally followed by Particle (YI 3) as marker, and obligatorily by a NP - normally marked by a Relator - functioning as Locational Comment.

This Core is optionally followed by an AP functioning as Adjunct.

4.4.1.3.3 - Formula:

F.10 N.Cl. III =

+ NP(TOP) ± YI 3 (SF) + NP(COMM) $^{\pm Rr(SF)}$ ± AP(ADJCT)

4.4.1.3.4 - Examples:

1. NP(TOP)-sf-NP(COMM)-Rr(SF)

/ Moo yi naa ' w . / - "I am here" AG002
I am this'at

2. NP(TOP)-NP(COMM)-Rr(SF)-AP(ADJCT)

/ Ibii Fransii ' w so . / BG046
you France'in also

" You are in French territory too. "

3. NP(TOP) | NP(COMM) -Rr(SF)

/ fo piiya | duniya no' w / - "There are two BC048
thing two world belly'at things in the world"

4. NP(TOP)-sf-NP(COMM)-Rr(SF)-AP(ADJCT)

/ a n'i bo ' o so . / - "He is AY034
he +'is the'at also there too."

4.4.1.4 - Existential Clause: The Nominal Clause Type IV conveys the mere fact of the presence or existence of the Topic, comparably to French "Voilà", "il y a", English "Behold", "There is"[1]:

4.4.1.4.1 - Element: A Topic

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1 It is less frequently-used than similar constructions in some languages: the sense is more often conveyed by the Verbs (TA 2) / (BA 2) -- "exist/not exist"

4.4.1.4.2 - S.F.s : An obligatory NP functioning as Topic is obligatorily followed by the Particle (BANA)[1] as marker. No Periphery occurs.

4.4.1.4.3 - Formula:

F.11 N.Cl.IV = + NP(TOPIC) + BANA (SF)

4.4.1.4.4 - Examples:

1. // Gi bana. // - "There was a dog" AV021
dog behold

2. // Par bani, i yi-n // - "There's a house, you see it"
house behold, you see-will (taped. conv.U)

4.4.1.5 - Interrogative Nominal Clause: The N.Cl. of Type V only functions in the Interrogative term of the Information System (4.5.1 below). It is less specific than the other interrogations as it requests a comment of any kind from the interlocutor on the Topic which it presents.[2]

4.4.1.5.1 - Element: A Topic

4.4.1.5.2 - S.F.s : An obligatory Nominal Phrase, or Clause-Construct marked by initial (K), functions as Topic[2], and is obligatorily preceded by the Particle (BI 6) as marker. No Periphery occurs.

4.4.1.5.3 - Formula:

F.12 $$\text{N.Cl. V} = + \left\{ \begin{matrix} (K)\text{Cl.Cstr} \\ \text{NP} \end{matrix} \right\} (\text{TOP}) + \text{BI 6 (SF)}$$

---

1 Variant (BANI)

2 The NP(TOPIC) is often one with a Relative Qualifier (5.3.2.1), the whole structure meaning "What about the one who....?"

4.4.1.5.4 - Examples:

1. /(Bi panni zaa bi?)/ - "What about the man AJ020
whatabout thread owner the with the thread?"

2. /(Bi gwaa k'a peen bi sa a n pi bi wosi...bi'y?)/ AJ019
whatabt. man that'he knife the took he + water
the divided..the(?)

"What about the man who divided the water with
a knife....?"

4.4.2 - The Verbal Clause:

Further layering (cf. p.134, fn.) may be recognised within the Core of the Verbal Clause (see 4.3 above), a Nucleus of obligatory Elements being set over against the Margin (various Complements including Indirect Object). The Nucleus may further be seen as consisting of Subject and Predicate - the last comprising Predicator and (optional) Direct Object, a grouping set up because of the need to refer to this part of the Clause alone in the analysis of the Nominalised Word-Stem (6.3.1.3.3,p.221) and in the Clause-Focus System (4.5.4). Thus at this low delicacy we have:

F.13 V.Cl.CORE = [+ S + PRED](NUC) ± COMP(MAR) [1]

and - presented in separate formulæ for convenience:

F.14 PRED = ± O + PD

F.15 $$\text{COMP} = \left\{ \begin{array}{l} \pm \text{ NP(IO) } \pm \left\{ \begin{array}{l} \text{NP} \\ \text{AdjncP} \end{array} \right\} \text{(EQ)} \\ \text{Sent.Cstr. (COMPT)} \end{array} \right\}$$ [1]

---

[1] Abbreviations: PRED = Predicate PD = Predicator
O = Object COMP = Complement IO = Indirect O
COMPT = Complementive EQ = Equation

- The various Readings and restrictions of these Formulae with the Peripheral Formula given above (F.3, p.135), yield a generalised linear formula (F.16, following page) and a series of Verbal Clause Types and sub-Types detailed in sections 4.4.2.1 - 4.

The sub-Types are based on the correlation between the various choices of Core Margin - Indirect Object and different forms of Complement - with Predicate selections and presence or absence of Periphery. The Verb Words do not have those strict limitations on the Clause structures in which they are permitted which motivate the distinction of Clauses into Transitive, Intansitive, and so on. The Verb Words themselves are sub-classified in accordance with the range of different Clause-Types in which each may be found (6.2.4, pp. 210 ff.).

4.4.2.1 - <u>The Nuclear Verbal Clause</u>: Verbal Clause Type I has none of the Margin Elements of the general Core (F.13, 15).

4.4.2.1.1 - Elements: Core - Subject, Object, Predicator; Periphery - Locative[1], Temporal, Adjunct.

4.4.2.1.2 - S.F.s : The Nominal Phrase functioning as Subject is obligatory except under conditions described elsewhere[2]; it is followed optionally by a NP functioning as Object and obligatorily by a Verbal Phrase which

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1 Semantically, the Locative has various other senses (such as accompaniment, beneficiary, instrument, and manner) also.

2 Reduced Question - 3.1.4.1.2.3: Motion - 3.1.4.2.1: Conversational Fragments - 3.2.4: Imperative - 4.5.2: Sentential Complement of V.Cl. Type IV.iv - 4.4.2.4

F.16 V.Cl =

$$F^{*} - \pm NP(S) - N/T^{*} - \pm NP(O) + VP(PD) \pm NP(IO) \pm \left\{ \begin{matrix} NP \\ SentCstr \\ Adjnc.P \end{matrix} \right\} (COMP) - A^{*} - \pm NP(LOC) - A^{*} - NP(TEMP) \pm AP(ADJCT)^{*} - SN^{*}$$

* NOTES:
- F : Elements in Focus appear here, see 4.5.4
- N/T : Position of Particles (N 5) and Tense/Aspect/Negation: 4.5.3, 4.5.5/6
- A : Alternative positions of AP(ADJCT)
- SN : Position of expansion of Split Nominal Phrase: see 4.4.4

functions as Predicator. This Core is followed optionally by a Periphery of NPs functioning as Locative and Temporal and an Adverbial Phrase functioning as Adjunct. These various functions are marked solely by selection and order[1] except that the NPs which function as Loc. and Temp. may be marked with a postposition Relator.

4.4.2.1.3 - Formula:

F.17 V.Cl. I =

$$(\pm)\ NP(S) \pm NP(O) + VP(PD) \pm NP(LOC) \pm NP(TEMP)^{2} \pm AP(ADJCT)$$

4.4.2.1.4 - Examples:

1. NP(S)-VP(PD)
   / moo ze-le / - "I will come" AG003
   I come-will

2. NP(S)...NP(O)-VP(PD)
   / a n daasi kinta / - "He founded the market" AF002
   he + market putdown

3. NP(S)...VP(PD)-AP(ADJCT)
   / a n ta so / - "He went too" AU030
   he + went also

4. NP(S)...NP(O)-VP(PD)-AP(ADJCT)
   / a n a da sa / - "He landed fair and square" AS014
   he + self dropped plonk

---

1 See 1.4.3.3.2, 4 + 5, p.36

2 C.H. see 4.4.2.3.3, p.148 ; position of ADJCT see F.16

5. NP(S)...VP(PD)-NP(TEMP) -Rr(SF)

/ a n wuti fin diin'o / - " he got up ARO02
he + rose date one'on one day"

6. NP(S)... NP(O)-VP(PD)-NP(LOC)-Rr(SF)- NP(TEMP)

/ moo ni'm dan wu m baaba pa fille diin / BA028
I +'my farm work my dad for[1] date one

"and I spend one day working my farm for may dad "

7. NP(S)-NP(O)-VP(PD)-AP(ADJCT)-NP(LOC)-Rr(SF)

/ a moo si so m wo ' w / BA049
he me receive also my hand'in[1]

"He takes me by the hand"

4.4.2.2 - <u>The Equational Verbal Clause</u>: The Verbal Clause with Nominal Complement is separated as Type II because only a few Verbs occur in this structure[2] and there is no Periphery.

The sense is usually equative, factitive, or naming.

4.4.2.2.1 - Elements: Subject, Object, Predicator, Indirect Object, Equation Complement

4.4.2.2.2 - S.F.s : The NP functioning as Subject[3] is optionally followed by a NP which functions as Object, obligatorily followed by a VP functioning as Predicator. There follows an obligatory Nominal or Adjunctive Phrase functioning as Equation Comp. optionally preceded by a NP which functions as Indirect Object. There is no Periphery.

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1 Meaning of 'Locative' cf. p.143 fn. 1

2 Verb-Word Classes I - L, 6.2.4, p. 210.

3 See p. 143 , fn.2

The NP(IO) is marked by a postpositional Relator.

4.4.2.2.3 - Formula:

F.18 V.Cl. II =

$$(\pm)\,NP(S) \pm NP(O) + VP(PD) \pm NP(IO) + \begin{Bmatrix} NP \\ AdjncP \end{Bmatrix}(EQ)$$

4.4.2.2.4 - Examples:

1. NP(S)...VP(PD) -AdjncP(EQ)..
   // a bi nyinta-n miŋa ' y // - "It won't turn out well" AX035
   it not sit-will good '(neg.)

2. NP(S)-NP(O)-VP(PD)-NP(EQ)
   // n a ba gwoɔ // - "they became men" AR024
   they selves made men

3. NP(S)...VP(PD)-NP(IO) -Rr(SF)-NP(EQ)
   // ni'n diga-l' a miŋa ma kir // AE004
   they'+ look-will'their self at chief
   "they look upon themselves as chiefs"

4. NP(S)...NP(O)-VP(PD)-##(IO)[1]-Rr(SF)-NP(EQ)
   // n tr' a pi ma ze // AU036
   they usually'it say (it)[1] about death
   "(the thing that) they call death"

4.4.2.3 - Relational Clause: The Verbal Clause of Tvpe III has an Indirect Object and possiblyna Periphery but no Complement. The IO is a Relational NP linked to the VP(PD) so that no other Element or Feature can be interposed.[2] It carries a variety of verb-specific meanings.

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1 Zero-Pronoun see 4.4.2.3.3, and refs. there

2 There is also a close Lexical and Semantic link with the Predicator, but further research in these areas would be necessary before this could be made a formal criterion.

4.4.2.3.1 - Elements: Core - Subject, Object, Predicator, Indirect Object;
Periphery - as Type I (p.143)

4.4.2.3.2 - S.F.s : The NP(S) (see p.143 ,fn.2) is followed optionally by an NP(O) and obligatorily by a VP(PD) and a Nominal Phrase functioning as Indirect Object which is marked by a postpositional Relator. This Core structure is optionally followed by a Periphery as in Type I (p.143).

4.4.2.3.3 - Constructional Homonymity:[1] There is C.H. between the IO in Type III Verbal Clauses and the NP(LOC)[2] in Type I which similarly may follow the VP(PD) and be marked with a Relator. Any of these post-Predicator Relationals may also be reduced to a simple Relator if the NP would be 3rd. person singular Pronoun (see 1.4.3.3.4, vii and e.g. 24, p.45), and thus yield C.H. with the Verb-Relational VP (5.4.1, p. 189).

This is seen in 4.4.2.2.4, e.g.4 above, and in 4.4.2.3.5, e.g.4.

4.4.2.3.4 - Formula:

F.19 V.Cl.III CORE = $(\pm)$ NP(S) $\pm$ NP(O) + VP(PD) + NP(IO)

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1 See 1.4.3.6, p.54

2 Or (TEMP) if not preceded by Locative or Adjunct.

4.4.2.3.5 - Examples:

1. NP(S)-VP(PD).. NP(IO)-Rr(SF)

/ a da sii-da' w / - "He rode a mare"[1] AF001
he rode horse-female'on

2. NP(S)-NP(O)-VP(PD)-NP(IO)-Rr(SF)

/ m a ka ibii 'w / - "I gave it to you" AG002
I it gave you'to

3. NP(S)-NP(O)-VP(PD)-NP(IO)/Rr(SF)-NP(LOC)-Rr(SF)

/ a ya da woo pa nyeesi ma / AY013
he self drop us for medicine with - "he helped us with medicine"

4. NP(S)...VP(PD)-#(IO)[2]-Rr(SF)-NP(TEMP) -AP(ADJCT)

/ a n ta n kan fir ki fiigaaa/ AY019
he + went (it)[2] with with today too longway

"and he took it a long way off until this very day"

5. NP(S)...VP(PD)-NP(IO)/Rr(SF)-AP(ADJCT)

/ a n dir go bi la so / AR004
she + climbed tree the up also

" and she climbed the tree, too"

6. NP(S)-VP(PD)-NP(IO)-Rr(SF)-NP(LOC)/Rr(SF)-NP(TEMP)

/ i ta-n woo n daas ' o domin tuu/ BD038
you go-will us with market 'to day-head all

"every day you take us to market"

4.4.2.4 - Sentence-Complement Clause: Type IV Verbal Clauses are those with a Sentence as Complement. They are divided into four sub-Types according to form of Complement and Verb Word in VP(PD):

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1 By the C.H. noted 4.4.2.3.3 above, this could also mean (if (LOC) instead of (IO)) "he fell onto a mare"

2 Zero Pronoun see 4.4.2.3.3 above, and refs. there.

IV.i - Quotative Clause: The Complement is a Discourse Construct[1] which may be in direct or indirect quotation. There may be an Indirect Object of person addressed. The Head of the VP(PD) is a Quotative Verb (VW Classes A.c,C.c,L.b - 6.2.4).

F.20 V.Cl. Type IV.i =

+ NP(S) ± NP(O) + Quot.VP(PD) ±NP(IO) + Disc(QOT)

Examples:

1. NP(S)-VP(PD)-Disc.Cstr(QOT)

/ n w ' "A to n Guta" / - "they say his name is 'Big'"
they say 'his name is big AX008

2. NP(S) ..NP(O)-VP(PD)-Disc.Cstr (QOT) -...

/ibii n a ma n w' "A to n Guta"ɓɔɔ?/ AX008
you not it hear they say his name is big eh

"Didn't you hear that they say his name is 'Big'"

3. NP(S)-VP(PD)-NP(IO)/Rr(SF)-Disc.Cstr(QOT)

/ a wu tabisa ma ...a n a baaga bi ze/ AS018
she said hunter to...he + his lion the kill

"she said to the hunter that he should kill his lion"

4. NP(S) -NP(O)-VP(PD)- DiscourseCstr(QOT)

/naa-duu a pi "Mɔɔ n'i dɔ-n ger bi ma"/ AR015
this-here it spoke I + 'am care-ing corpse the over

"this one said 'I am going to look after the body' "

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[1] The Quotative Clause is always Positive, Assertive, Declarative, Neutral, Past, Non-Focal. The marked Systemic terms may be added in a Quote-Auxiliary Clause (3.1.2.3)

IV.ii - Purposive: The Sentence Construct is marked with an initial (K) and has a sense of purpose or intention.

F.21 V.Cl. Type IV.ii = + NP(S) ± NP(O) + VP(PD) + Sent(PUR)

Examples:

1. NP(S)-VP(PD)-sf-Sentence.Cstr(PUR)
/a le ba k'a yibii nyaso'w'i / AX015
his mouth notexist that'he you catch'at'(neg.)
"he didn't want to catch you"

2. NP(S) - NP(O)-VP(PD)-sf-Sent.Cstr(PUR)
/ Wusu a ka k'a n a dinda-n/ AY057
God it gave that'he + it learn-will
"God let him learn it"

3. NP(S)-VP(PD) - sf - Sent.Cstr(PUR)
/ Ibii nyinta-n kun do mi...? / AL015
you sit-will that day dawn...?
"Will you wait till dawn ... ?"

IV.iii - Neutral Sentential Clause: The Sentence Construct functioning as Complement has a range of senses according to the main Verb: it is not overtly marked.

F.22 V.Cl. Type IV.iii = + NP(S) ± NP(O) + VP(PD) + Sent(COMP)

Examples:

1. NP(S)- VP(PD)-Sent.Cstr(COMP)
/ moo teedaka pi zaa bi noko / AM020
I think water owner the excel
"I think the man with the water was best"

2. NP(S)-VP(PD)-Sent.Cstr.(COMP)

/ bi `boko··n a zu i wu / AQ008

the resemble··will it throwaway you do[1]

"that's the same as if you throw it away"

3. NP(S)...VP(PD)-Sent.Cstr(COMP)

/ a bi ye moo n ta, wa ! / BA022

he not allow I + go (excl.)

"Huh ! He won't let me go !"

4. NP(S)-NP(O)-VP(PD)-Sent.Cstr(COMP)

/ ibii i dama i wuta ... ? / AM022

you self able you liedown

" could <u>you</u> lie down ...?"

5. NP(S)...VP(PD)-Sent.Cstr(COMP)

/ a n diga n gyaan bi ga / AN008

he + looked their girlfriend the died

"he saw that their girl-friend was dead"

IV.iv - Condensed-Complement Clause: The Complement of Type IV.iv is a Clause of which the Subject is co-referential with that of the main Clause and is omitted.

F.23 V.Cl.TypeIV.iv =

+ NP(S) ± NP(O) + VP(PD) + ConsensedCl(COMP)

Cond.Cl.(COMP)

1. NP(S)- VP(PD) - [NP(O) -VP(PD)]

/ m siiliga koŋi naa-duu ze / BC001

I takecare that this-here hit

"I am laying this out very carefully"

---

1 Predicate-Focus - see 4.5.4.3, p. 162.

2. NP(S)-VP(PD)- Cond.Cl(COMP) [VP(PD)-NP(IO)/Rr(SF)]

/ a sor diga woo ma / AYO13

he alsoed look us at

" he also looked after us"

3. NP(O)[foc][1]-NP(S)-NP(O)-VP(PD)- Cl(COMP) [VP(PD)]

/Go-nyi ibii i dama bi...? / ALO12

tree-child you self able eat

"Could you eat fruit ...?"

4.4.3 - The Nominal Phrase Coordinate Expression:

The above description of Clause Structure presents all the Elements except those whose exponents are higher-ranked Units in Construct function as being represented by Phrases. The only departure from this normal hierarchical arrangement is the possibility of replacing a Nominal Phrase by a Nominal Phrase Expression[2] which coordinates two or more NPs. Though less frequent than coordinate NP constructions in many languages (including English) there are some forty examples of this in our corpus. The Nominal Phrase Expression has two possible structures:

4.4.3.1 - With Conjunctions: The first coordinate NP is unmarked: the second is prefaced with the Particle (KAN) and followed by (KI 1): any further NPs (5 is the maximum recorded) are followed by (KI 1) and optionally preceded by (KAN). As there are fewer examples

---

1 cf. 4.5.4.2, p. 162.

2 cf. 1.4.3.4. p.46, and 3.1.2, p.105.

of this structure than there are readings of the NP formulæ (5.4 below) not all the NP structures are found as coordinates but there does not seem to be any significant pattern as to which does so occur. There is a tendancy for coordinate NPs to be of the shorter structures, but some quite complex examples are found (e.g. 4 below [1]).

Examples:

1. Coord.NP(S)
[NP -SF - NP -SF]VP(PD)-Sent(QOT)

/ Seedu kan Lamusa ki w ' a ze-le / AG004

Seedu with Lamusa too say they come-will

"Seedu and Lamusa say they will come"

2. CoordinateNP(IO)
NP(S)... -VP(PD) [NP .. SF - NP -SF- NP -SF]

/ a n tri ta doŋo'w kan nyɔɔn-pi ki wu nyɔɔ ki/

he + usually go gourd'with AS002
with oil-water too porage cold too

"He used to take a gourd, some milk and some cold porage"

3. / K'a gani ... Garango Naa wɔɔ lee zaa, kan Busin Naa ki,

/ kan Busin Naa ki, San Naa ki, Len Naa ki, Belego

/ Naa ki, Warego Naa ki, Konteega Naa ki / BG004/5

"So that he could see ... the chief of Garango, the head of our region, and the chiefs of Busim, Sanogho, Lenga, Belego, Nwarigu, and Komtoéga"

---

[1] Also examples 3 and 4 in 4.4.4, p.156.

4. Coordinate NP(S)^{foc} [NP | NP]-SF

// Bo yi goota a n'i do ma bi, | a n ta k'a ya nyeesi zaa bi gaa bi ki,

theone is stayed she +'is care over the | she + (who) went that'she go medicine owner the call the too

NP(S)^{repeat}....NP(O) - VP(PD)

// buro yi gwaa bi nwa. // AR008/9

they are man the loved

"The one who stayed and looked after him and the one who ran to fetch the medicine-man - they were the ones who loved their husband."

4.4.3.2 - Without Conjunctions: There are a few examples of several NPs in succession fulfilling a single function without any Particle to mark the coordination. This usually occurs in Hesitant Discourse (p. 86), and is often accompanied by hesitant phonology and/or has the hesitation-Noun' // hina // - "thingummy" - as Head of one of the NPs thus coordinated. This appositive coordination often has the sense of explication, the NPs being synonymous rather than cumulative.

Examples:

1. // Pi naa - la n ba // - "The water - rain came"

water this - rain + did AM012

2. // A foon kwaay, a miin-yaa kwaay, a komi kwaay BC007/8 a yi nyoon-pi bi zi //

his sense all, his nose-hole all, his omnia all they are oil-water the toward

"His mind, his nose, his everything were concentrated on the milk"

3. // a n bor i n hina'w, ko naa, Kusaa ko naa, raa? // AN028/9

it + come you with thingummy'to, country this, Kusasi country this, eh?

3 ctd.) "could it bring you to whatsit - to this country -
to this Kusasi country?"

4.4.4 - The Split Nominal Phrase:

The statements made in 4.4.2 about the linear order of items in Clause Structure needs qualifying by an indication of the occurrence of Split Nominal Phrases. In these the Qualifier expansion of the NP (Adjective, Numeral, or Quantifier)[1], or the non-initial NPs of a Coordinate NP-Expression (4.4.3), may be moved to a position at the end of the Clause. This occurs whether the NP in question is Subject, Object or Indirect Object.

Examples :

1. $NP(S)^{head}$ ... $VP(PD)-NP(S)^{Q:num}$

/ Gwaa yi nyinta kaaku / AJ001
man is sat three

"Once upon a time there were three men"

2. $NP(S)^{h}$...$VP(PD)-NP(S)^{Q:q}$

/ Ni'n ginga kwaay / - "They all died" AM003
they'+ diedoff all

3. $NP(S)$...$NP(O)^{init}-VP(PD)-NP(O)^{coordinate}$

/ a n a la-ka bo'w kan a laari gita-re la-ka ki/
he + his pubes-hair tookout'of with his wife AV047
big-ish's pubes-hair too

"He took out (the chief's) hair and his senior wife's"

4. $NP(S)-NP(O)-VP(PD)-\#(IO)/Rr(SF)$ ¦ $NP(IO)^{coord}$

/Guta ya suu ' w ¦ kan a fo faan bi ki/ AX080
Guta self rule ' (it)[2] over with its thing all the too

"Guta is in charge of it and everything in it"

---

1 See 5.3.2 , p. 175 ff.

2 Zero Pronoun, see 4.4.2.3.3 and refs. there

4.5 - Systems of Clause-Rank:

Clause Rank is the locus of a set of cross-classifying categories[1] as diagrammed on the following page. Choices must be made for Information, Mood, Polarity, Tense and Aspect, and for Focus - of which the Focal term gives entry to a further System in which the locus of the Focus is chosen. In order to show the cross-classification the Examples will all be given together (4.5.7, pp.164 ff.) after the choices and exponents have been described.

4.5.1 - The Information System:

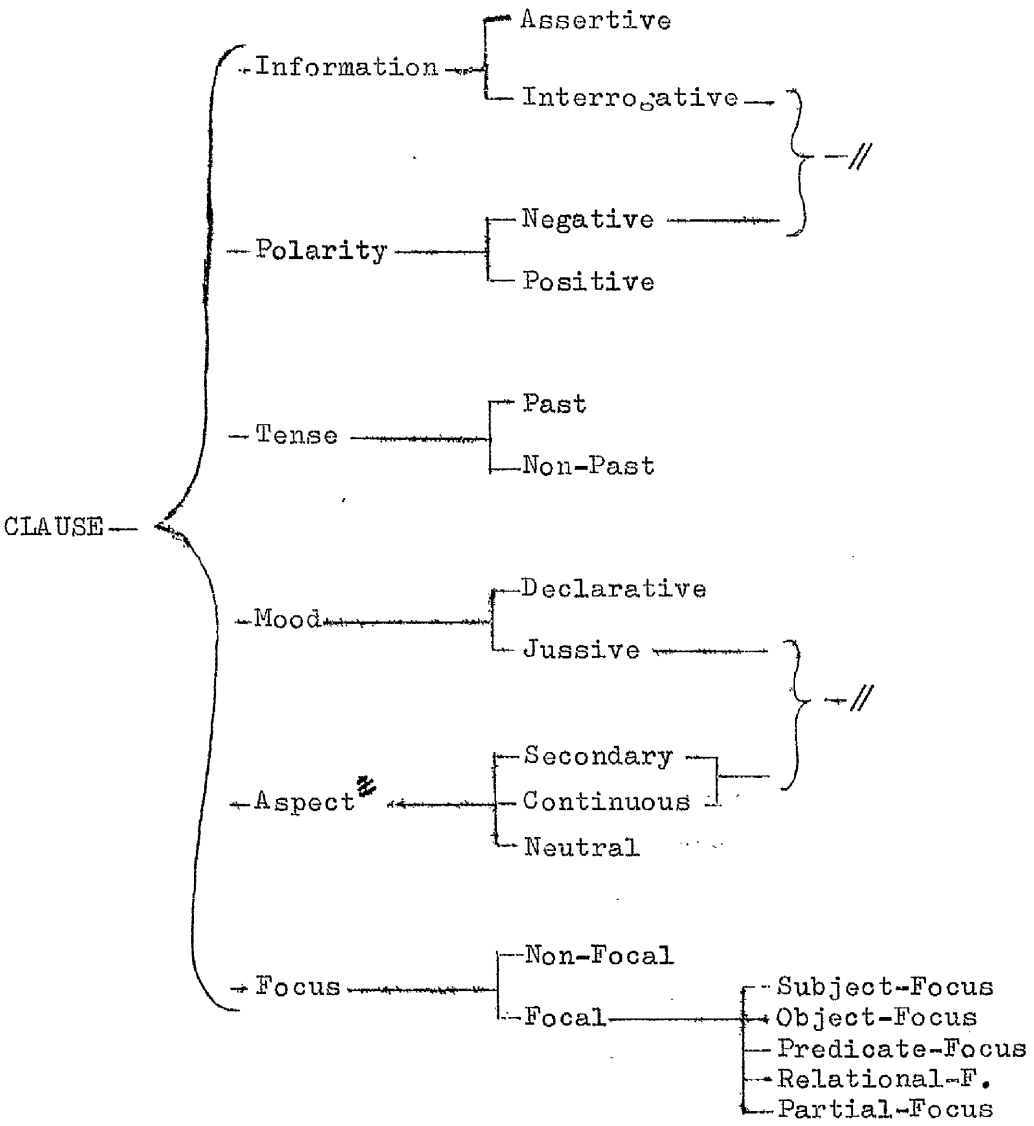
The Assertive is the unmarked term of the Information System. The Interrogative is the marked term, marked by the selection of a Nominal Clause Type V (see p.141), or by the selection of an Interrogative Word as Head of one of the Phrases representing the Elements of the Clause. The following list presents the Interrogative Words and an the item which they replace:

(BO 1)	-	non-personal NP (S/O/COMP)	: "what?"
(NKA)	-	personal NP (S/O/COMP)	: "who?"
(KALA)	-	Head of NP when M present	: "which?"
(KA 2)/(BII)	-	NP(LOC)	: "where?"
(BUDO)	-	NP(TEMP)	: "when?"

(ctd. p. 159)

---

[1] With the restrictions: Jussive only with Neutral Aspect; Interrogative does not co-occur with Negative; - Neg. Interrogative is obtained by using a Sequence (3.1.2.2) with Interr. in the Auxiliary and Neg. in the Main.



SYSTEMIC DIAGRAM 3 : Clause-Rank Systems

4.5.1 list of Interrogatives ctd.)

(KALɔ) - Numeral Qualifier of NP :"how many?"

(Lɔ 4)/(LUNLɔ) - Adjunctive (in NP,AdjncP,AP):"how,why?"

- To interrogate the Verbal Phrase (Bɔ 1) is used as Object of (BA 1) - "what is .... doing?"

The Interrogative Clause is usually additionally marked with the Clause- or Sentence-final[1] marker (Y).

The Interrogative functions in the structure of conversations in a similar way to the Question (3.1.4.1.2), although it requires a more specific response from the interlocutor.

4.5.2 - The Mood System:

The Declarative is the unmarked term of the Mood System. The Jussive term is marked by the Particle (K) initial in the Clause. This is distinguished from the other uses of (K) - q.v. 7.2.2 - by the fact that the Jussive is the only independent Clause to take this marker. Jussives occur in all Persons of the Pronominal System (6.4.3) with a range of command, optative and desiderative senses ("I want to...", "you should..." "let him ...."). A special case is the Second Person Sing. Focal Jussive - the Imperative - in which the NP(S) and the (K) marker are omitted (see p.44, and e.g. 22-3, p.45)

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[1] Very occasionally (Y) is found immediately following the Interrogative Word instead of, or as well as, finally. (GE 1) is found in place of (Y) in some instances.

4.5.3 - The Polarity System:

The Positive is the unmarked term of the Polarity System. The Negative is marked in several ways:

4.5.3.1 - Nominal Clause Negative: The Negative in the Nominal Clause is marked by the Particle (BEE 1) placed before the Copula (N 2) wherever this occurs in the Clause (4.4.1 above).

4.5.3.2 - Negative Verb: The Verb Word (BA 2) - "not exist" - is a Negative Verb and its selection as Head of the VP(PD) marks the Clause as Negative (see e.g. 10, p.166).

4.5.3.3 - Verbal Clause Negatives: Other Verbal Clauses are marked as Negative by the Particles (BRI 1), and (N 4), which occur following the NP(S). (BRI 1) occurs in Clauses with Non-Past Tense and (N 4) in those with Past Tense[1].

4.5.3.4 - Focal Negative: The Negative Marker of a Focal Clause is Clause-initial Particle (BA 3)[2].

4.5.3.5 - General Negative: The Particle (BI 5) is found in place of the specialized markers above, - for (BEE 1) four times, for (BRI 1) thirteen times, for (N 4) twenty-two times, and for (BA 3) once.

4.5.3.6 - Supplementary Negatives: Like the Interrogative (4.5.1 above) the Negative Clause - or the Sentence in which it occurs - is normally marked by final Particle (Y). There are

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1 Tense see 4.5.5: for neutralisation of the Aspect System with Negative see 4.5.6: Negative does not occur with Interr.

2 This Particle only occurs three times.

a few instances of (GE 1) and (RAA) - normally Question-markers (3.1.4.1.2) - in this function. There is also a Negative Pronoun Morpheme (SI 5) which occurs alone or in Compounds[1] in Negative Clauses in a way similar to English "any", French "aucun(e) ". The Nominal Word (KINA) - which occurs in Positive Clauses, with or without a Relator, in Locative function with the sense of "thus" (manner) - is most commonly found in Negative Clauses where it fill the Temporal function with the sense of "(not) yet": see e.g. 31, p. 169 below.

4.5.4 - The Focus System:

The Non-Focal is the unmarked term of the Focus System. Focus is normally marked by placing the item in Focus at the beginning of the Clause, before any Clause- or Sentence-initial Particles. The choice of Focal yields a range of emphatic and thematic senses. The various possibilities for item in Focus yield some variations:

4.5.4.1 - Subject Focus: As the NP(S) is normally in initial position in the Clause (in the absence of Particles) Subject-Focus is represented replacing the NP(S) in its normal position by a Pronoun or Demonstrative, and shifting the NP(S) to a position before this (and before any initial Particle).

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1 /fo-si/ - "anything"; /gwaa-si/ - "anyone"; /lee-si/ - "anywhere" ; /mii-si/ -"any matter, trouble. - see e.g. 7, 10 p.166.

4.5.4.2 - Object-Focus: The NP(O) is similarly shifted to a place at the head of the Clause, and replaced in the normal Object position by a Pronoun. In one example the NP(O) of a Clause-Construct is in Focus and is shifted to precede the matrix Clause, but is not replaced by a Pronoun (see e.g. 3, p. 165).

4.5.4.3 - Predicate Focus: If the Verb is in Focus - except Jussive Imperative, see 4.5.2 - the whole Predicate is front-shifted, and its place following the Subject[1] is taken (optionally) by a Pronoun Object if the Predicate includes a NP(O), and a Pro-Verb - (A 5) or (WU 1) which is inflected with the appropriate Suffix if the Clause is Non-Past (see 4.5.5).

4.5.4.4 - Relational Focus: The NP (IO / LOC / TEMP) be in Focus, and in this case the Phrase concerned appears Clause-initially without being replaced in its usual position (but see 4.5.4.5 below).

4.5.4.5 - Partial Focus: There are also cases where the item placed in Focus is not a whole Clause-constituent. The NP of a Relational Phrase may be front-shifted for Axis-Focus, leaving the Relator behind in the normal place with a Pronoun as Axis Repeat[2]. Similarly the NP Modifier of any NP of the Clause may be placed in Focus by front-shifting, leaving a Repeat Pronoun in its normal pre-Head position in the NP in question. (see 5.3 below).

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1 And any post-Subject or pre-Predicate Particles.

2 Which may have zero representation - see p.45.

4.5.4.6 - Multiple Focus: There is one example in the Corpus of a Clause with Subject-, Object- and Predicate-Focus (e.g. 33, p.170).

4.5.5 - The Tense System:

The unmarked term of the Tense System is the Past. This is used, not only in the sense of past time, but also in general, definite, and timeless senses: its Secondary Aspect (see 4.5.6 below) is habitual in sense.

The Non-Past Tense is used when a specifically present or future time is referred to. It is marked by a NP(TEMP) with one or more of the following:

(BOOTI) - "tomorrow" (FIR 1) ± DemW - "today"
(DIITAA)[1] ± DemW - "right now" (TEN) + DemW - "this time"
(FIN)[2] + DemW - "this date" (ZIR)[3] - "2 days hence"

- and/or by a Non-Past Verb Word (6.4.1, p.227) as Head of the VP(PD) - with Suffix (-LE 1)/(-N 1). In Nominal Clauses the Non-Past is marked by the use of (Y= 3) as Copula in place of (N 2).

4.5.6 - The Aspect System:

The Aspect System presents a three-way choice between the unmarked Neutral and the marked Continuous[4] and Secondary. The six possible combinations of Tense and

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1 Variant (DIINAA) : both may be doubled (6.3.1.3.1).
2 Variant (FILLE)
3 Variant (reduplicated - 6.3.1.3.2) - (ZIZIR)
4 All Nominal Clauses are, however, intrinsically Continuous.

Aspect are presented in Table 1 below with their frequence of occurrence in terms of number of tokens in the Corpus.

TABLE 1 - Tense/Aspect Frequencies

	Past	Non-Past
Neutral	1478	334
Continuous	47	75
Secondary	34	17

Continuous is marked by the Particle (YI 3) preceding the Predicate. The Continuous/Neutral contrast is neutralised in the Negative where the Negative Marker occurs in the pre-Predicate slot.

The Secondary Aspect is Habitual in the Past, with marker (TRI)/(TI) occurring before the Predicate: the Secondary Non-Past is Inceptive or Future, marked by the Particle (BRI 2) before the Predicate. The contrast with Continuous/Neutral is neutralised in the Negative as Particles (BRI 1) and (BRI 2) do not co-occur.

4.5.7 - Examples:

The possible combinations of Clause-Systemic choices run into hundreds. We give below examples of the Tense/Aspect possibilities in the Non-Focal Declarative Assertive (examples 1 - 9). Thereafter we give one or two examples of each other combination of the Information, Mood, Polarity and Focus Systems (examples 11 - 30),

irrespective of Tense/Aspect choices - the full range of choices in the Focus sub-System is only exemplified in the Positive Declarative Assertive (examples 17 - 21, cf. 25-6). Finally, examples are given of Negative-Interrogative Clause-Sequence (examples 31 - 2 cf. p.157,fn.) multiple Focus (33) and Focus on embedded-Clause Object.

Non-Focal/Positive/Declarative/Assertive:

1. Past/Neutral:

   ⁄ a ta ⁄ - "he went" AX056

2. Past/Continuous:

   ⁄ bɔ yi ta ⁄ - "the one who was going" AR030
   theone is go

3. Past/Secondary (Habitual):

   ⁄ M tri ta ⁄ - "I usually go" BA029

4. Non-Past/Neutral:

   ⁄ a n ta-n ⁄ - " he will go" AL015
   he + go-will

5. Non-Past/Continuous:

   ⁄ a n'i ta-n ⁄ - "he is going" AN009
   he +'is go-ing

6. Non-Past Secondary (Inceptive):

   ⁄ a br'a nya ⁄ - "it is going to end" AU037
   it will'self end

Non-Focal/Negative/Declarative/Assertive:

7. Past/Neutral Continuous:

/ si n leda a mini 'y / BC046
any not excel his mateover'(neg.)
"No one was better than another"

8. Past/Habitual: (cf. No.3 above)

/ moo n tri ta / - "I don't go" BA013
I not usually go

9. Non-Past (Aspect neutralised) ± Nominal Clause:

/kun kwiiye bee n'i, a bri bo-le 'y / AX025
that dryseason not is'(neg.) he not goout-will'(neg.)
"when it's not the dry season he won't go out"

10. Past/Neutral (Negative Verb and Pronoun):

/ Mii-si ba 'w 'i / - "No trouble!" AX003
palaver-any notexist 'in'(neg.)

Non-Focal/Declarative/Interrogative:

11. / K'i a bo ba 'y? / - "What to do?" AX004
that 'you go what do'?

12. / Bo n'i sara ze-n naa ge? / AU022
what +'is play hit-ing this eh?
"Who is having a party here?"

Non-Focal/Jussive/Assertive:

Positive:

13. / K'i ta n. / - "You should take it." BB008
that 'you go (it) with

e.g. Non-Focal/Pos./Juss./Ass. ctd.)

14. /(K'ɔɔ pi)/ .. " We should tell it " AW027
that 'we speak

Negative:

15. /(k'i b'i si)/ - "Don't run !" AS008
that 'you not 'self run

Focal/Positive/Declarative/Assertive:

17. Subject-Focus:

/(Gwɔɔ nɔɔn ku'n yi ta-n bi)/ AJ002
men those that 'they are go-ing (sf.)
"Those man - as they were going..."

18. Object-Focus:

/(Min wɔɔ yi dɔkta naa n)/ BD027
palaver we see morning this on
"We 've had a problem this morning"

19. Predicate-Focus:

/(A pi a n a-le)/ - "He will say it" AP004
it speak he + do-will

20. Relational-Focus:

/(Booti n a sula)/ - "Tomorrow it will be AX088
tomorrow on it recur repeated "

21. Partial-Focus (NP Modifier)[1]

/(Min bi a teka naa-duu)/ - "The story, that's the end of it"
palaver the its end this-here BC034

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[1] Axis-Focus see e.g. 25, 26.

Focal/Negative/Declarative/Assertive:

22. Subject-Focus

/ Ba kyaa bi k'a wir i n fɔ / AN031
not hawk the that'it fly you with even

"Not even a hawk, if it flew with you "

23. Predicate-Focus:

/ A yi mi'n a-le n pa biisi / AV026
it see I'not do-ing them from longtime

"I never got any from them in the past"

Focal/Positive/Declarative/Interrogative:

24. Object-Focus:

/ Bɔ a n a ba-n bɔ'ɔ' ? / AX006
what he + it do-will the'at'(?)

"What's he doing there?"

25. Partial Focus (Axis):

/ ka zi-zi a n ta'w'i ? / AX095
where side-side it + exist (it)'at'(?)

"Where on earth is it?"

Focal/Jussive/Assertive:

26. Positive/Partial-Focus(Axis):

/Gwaa k'a min miŋa pi k'a fɔbi-le bɔ n a ka'w/ AQ002
man that'he word good speak that'they thing-eat-ing take-out they it give (him) to

"Any man who spcke the truth, they should take out some of the food and give it to him."

Focal/Juss./Ass. examples ctd.)

27. Positive/Predicate-Focus (Imperative)

/ Diga ! / - "Look !" AX102

28. Negative/Subject-Focus (3rd.person)

/ Gwaa k'a n a do'y. / - "No one must know" AV049
man that'he not it know

29. Negative/Predicate-Focus (ct. No.15)

/ Ba k'i to m wu'w'i ! / AW013
not that'you step my porage'on'(neg.)
"Don't tread on my porage !"

Focal/Positive/Jussive/Interrogative:

30. / Kekee k'i ta ka'y? / taped conv.V
bicycle that'you go where'(?)
"So you should go where by byke?"

Negative/Declarative/Interrogative:

31. Focal (Clause-Sequence):

/ Ba a lo a n moo nyaso kina'y? / AX013
do he how he not me catch yet'(?/neg.)
"Why hasn't he caught me yet?"

32. Non-Focal(embedding):

/ Bo a ka ibii n a bil Wusu to ...? / AX072
what it causes you not him call God's name
"Why don't you call him by God's name ... ? "

Multiple Focus:

33. ⟨ Sisi bi - yallu - a bi a n a-le diin ge? ⟩ BA003
horse the - grass-it eat it + do-ing one eh?
"The horse - grass - eats nothing else, does it "

Focus of Embedded Object (no repeat):

34. ⟨ Go-nyi ibii i dama bi...? ⟩ AL012
tree-child you self able eat...
" Fruit can you eat ...?"

CHAPTER 5 - THE PHRASE

5.1 - Introduction: Phrase Function

The Phrase is the rank par excellence where there is correlation between the Structure and the Function of Units. Each functional Class has its own characteristic set of structures not shared with the other Classes.

The Phrase functions in the Clause. Nearly all the Elements of Clause-structure have Phrases as at least possible exponents: that is, there is much less recursion and rank-shifting at Clause Rank. Phrases are not used very widely as Syntagmatic Features (but cf. 5.2.1 below) and where they are so used it is usually as a secondary function. As an instance we may cite the case of the use

of a Nominal Phrase whose primary function is as Temporal in a Clause to signal also a boundary or a structural Type at Section or Paragraph Rank.

5.2 - Functional Classes:

There are four functional Classes of Phrase in Bisa, and every Phrase belongs to one of these Classes. The functions of each will be described here, while their characteristic structures are presented below in 5.3-4 .

5.2.1 - The Nominal Phrase:

The Nominal Phrase functions as one of the Elements of the Core of the Nominal or Verbal Clause. In the Nominal Clause as Topic and Comment of Types I and III (4.4.1.1/3), Topic of IV and V (4.4.1.4/5) and Observer of Type II (4.4.1.2). In the Verbal Clause as Subject and as Object, and also as Indirect Object (Types II, III, and IV.i) .

In Clause-Periphery the NP functions as Locative or Temporal: in these functions, as in IO and in Comment of Type III N.Cl., there is usually a Relator as SF - the cases where it may be absent are determined by the Head Word of the NP (Noun-Classes C, D, E, F. : see 6.2.1.2, p.205).

The NP has some functions as SF at high Ranks and may appear as a Minor Sentence without entering into a Clause Structure (see 3.2.5, pp. 128 ff.). Nominal

Phrases also enter into Coordinate Expressions - see 4.4.3, p. 153 . The NP may function recursively as an Element in the NP - Modifier and Descriptive in Type II (5.3.1.1/3 below) and Head in Type IV .

5.2.2 - The Verbal Phrase:

The Verbal Phrase functions as Predicator in the Verbal Clause. In the layering relations of the V.Cl. Core (4.4.2, p. 142) the Predicator and Object together form the Predicate, which also has Construct function as Root of the Nominalized Word-Stem (Type III.iii, 6.3.1.3.3). The Predicate also functions as a single entity when front-shifted under Focus (4.5.4, p.162).

5.2.3 - The Adjunctive Phrase:

The Adjunctive Phrase functions as Comment in Nominal Clause Types I and II (4.4.1.1/2). It also functions in the Verbal Clause as Equative Complement in Type III (4.4.2.3).

5.2.4 - The Adverbial Phrase:

The Adverbial Phrase functions as Adjunct in the Periphery of all Types , in commutation with the NP (Locative/Temporal) in the Nominal Clause, and before, between, or following them in the Verbal Clauee (see Ch.4 F.2, 3 p. 135 and F.16, p.144).

5.3 - Structure: The Nominal Phrase

The Nominal Phrase, besides having the widest range of potential functions (see 5.2.1 above) also has the greatest potential of all the Phrase-Classes for expansion, and the richest assemblage of possible structures. There are four major Types of NP of which the first is by far the most common in Text material.

5.3.1 - Nominal Phrase Type I - Pronoun Phrase:

The Nominal Phrase of Type I has a Pronoun Word as its Head, no pre-Head Modifier, and a very limited potential for expansion (in terms of bothtype and token). About 60 % of the NPs in the Corpus are of this Type, but only a total of 17 examples have any expansion.

5.3.1.1 - Elements: Head, Totalizer, Determiner (H,TOT,DET)

5.3.1.2 - S.F.s : An obligatory Pronoun Word which functions as Head is optionally followed by a Quantifier Word functioning as Totalizer and/or a Demonstrative Word functioning as Determiner.

5.3.1.3 - Formula:

F.1 NP.I - PnP = +PnW(H) ± QuantW(TOT) ± DemW(DET)

5.3.1.4 - Examples:

1. // Moo diga naa' // - "I consider now " ANO17

2. // A n a ba lu. // - "And he made her (his) wife."
he + her did woman AMO12

3. // ibii do raa? // - "do you know...?" AJ022
you know eh?

4. // nbɔɔn a dama ge? // - "Could they...?" AM005
they selves able eh?

5. [Pn(H) - Quant(TOT)]
//nbɔɔn kwaay yi dir gɔ bi la // AR027
they all are climb tree the up
" they all climbed the tree "

6. [Pn(H) - Dem(DET)]
// wɔɔ naa sɔŋuda ba // - "We here give help"
we this aide do

7. [Pn(H) - Quant(TOT)-Dem(DET)]
// n kwaay naa ... // -"All of them ..."
they all this

5.3.2 - Nominal Phrase Type II - Noun Phrase:

The Noun Phrase - that is, that which characteristically has a Noun Word as Head - is the second Type of NP. It accounts for 32 % of the NPs in the Corpus, but has a very complex set of structural options.[1] It may be given a general formula at a primary level of delicacy:

F.2 NP.II = ± MODIFIER + HEAD ± QUALIFIER

The Modifier (M) is a recursive NP : several layers of nesting occur - see examples 2 b and c, 4 ; p.

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[1] However, the 10 (out of 41) Types starred in Tables 1 - 2 (pp.177,185) account for 93% of the tokens in the Corpus.

The Qualifier is analysed at a further degree of delicacy into three Elements: Descriptive, Specifier and Determiner. Each of these has several alternative exponents. The Formula (F.3 below) which covers all the variants found in Text also generates some Readings which have not been recorded: Table 1, p.177, shows which Readings have been found.

The Head in this Type is normally a Noun Word, but sub-Types are set up to cover special cases including those where items which normally function in the Qualifier (Q) are raised to function as Head (H).

5.3.2.1 - Noun-Head Phrase - Type II.1:

5.3.2.1.1 - Elements: Modifier, Head, and Qualifier of Descriptive, Specifier and Determiner.

5.3.2.1.2 - S.F.s : a) A NP functioning as Modifier optionally precedes the obligatory Noun Word which functions as Head.

b) There may optionally follow a Qualifier of one or more of the following Elements (in order):

i) A Demonstrative Word or an Adjective or Adjunctive Word functioning as Descriptive (DESC); the Adjective is optionally followed by a recursive NP (see 5.5.2.1).

ii) A Numeral Word, a Quantifier Word, or a Relative Sentence-

TABLE 1 - Nominal Phrase II.1

No.	MODIFIER	HEAD	QUALIFIER		
			DESCRIPTIVE	SPECIFIER	DETERMINER
*1		NW			
*2	NP	NW			
*3		NW	AdjW[1]		
4	NP	NW	AdjW		
5		NW	AdjW + NP		
*6		NW	DemW[2]		
*7	NP	NW	DemW[2]		
8		NW	AdjW		DemW
9		NW	DemW		DemW
10	NP	NW	DemW		DemW
11		NW	AdjW	RelSent.Cstr	
12		NW	DemW	RelSent.Cstr	
13		NW	DemW	NumW	
14		NW	DemW	QuantW	
15	NP	NW	DemW	QuantW	
16		NW	AdjW	RelSent.Cstr	DemW
17	NP	NW	AdjW	QuantW[3]	DemW[3]
18		NW	DemW	NumW	DemW
19		NW	DemW	RelSent.Cstr	DemW
*20		NW		NumW	
21	NP	NW		NumW	
*22		NW		QuantW	
23	NP	NW		QuantW	
24		NW		RelSent.Cstr	
25		NW		NumW	DemW
26	NP	NW		NumW	DemW
27		NW		RelSent.Cstr	DemW
28	NP	NW		RelSent.Cstr	DemW
29	NP	NW		QuantW	DemW

* see p.175, fn.

[1] Or AjncW : so throughout

[2] It is not possible to distinguish Descriptive or Determiner function here: there is no semantic difference.

[3] In the only example, the order is DESC-DET-SPEC

ctd. from p.176)

-Construct functioning as Specifier (SPEC). The Relative is marked by the initial Particle (K).

iii) A DemW functioning as Determiner (DET).

5.3.2.1.3 - General Formula: (for Readings recorded see Table 1, p.177):

F.3 Noun-Head Phrase: NP.II.i =

$$\pm\ NP^{I/II}(M) + NW(H) \pm \left[\pm \left\{ \begin{matrix} AjncW \\ AdjW \pm NP \\ DemW \end{matrix} \right\} (DESC) \pm \left\{ \begin{matrix} NumW \\ QuantW \\ RelS.C. \end{matrix} \right\} (SPEC) \pm DemW(DET) \right] (Q)$$

5.3.2.1.4 - Examples: (numbered as Table 1)

1. / Dan a n a wu-n. / - "He is a farmer." AA002
farm he + it work-ing

2.a / awɔ le ta / - "he wanted" AM004
his (M) mouth (H) exist

2.b $M(H^{NW} +Q^{DemW}) + H^{NW}$

/ bila a panni bi paŋa n. / AJ012
crossed he thread the strength by

"He crossed by the strength of the thread."

2.c $M(M(H^{NW} +Q^{DemW}) +H^{NW}) + H^{NW}$

/ budu bi min tɔ / BH011
relative the palaver name
- 'name of (the) matter of the relative(s)' ,
idiom for "for the sake of (his) relatives"

3. ⁄ bonita gandaa-rɔ n ⁄⁄ AU021
monster great-s is
"they were huge monsters"

4. (the recursive NP functioning as Modifier is the example of this structure):

$M^{(M^{(H^{PnW})}+H^{NW}+Q^{AdjW})}+H^{NW}$

⁄ a laari gita-re la-ka ⁄⁄ AV047
his wife big-ish pubes-hair
"his senior wife's pubic hair"

5.

$H^{NW}+Q^{(Desc:AdjW+NP^{(M^{(H^{NW})}+H^{NW})})}$

⁄ lu-ban gusi-le min zaa ⁄⁄ AT006
woman-crone age-ing palaver owner
" a trouble-making old woman"

6. ⁄ n yi ko naa biri-n Wuriyaŋa ⁄⁄ AF003
they are country this call-ing Wuriyanga
" they call this village Wuriyanga"

7.

$M^{(M^{(H^{PnW})}+H^{NW})}+H^{NW}+Q^{DemW}$

⁄ mɔɔ zi-baa binke naa ⁄⁄ AY023
my work-ment place this
"this work-place of mine"

8. ⁄ Kun la guta bi ba ⁄⁄ - "When the big rains come"
that rain big the do AH003

9. ⁄ Kir bi naa m'n gaa ⁄⁄ - "This chief took them"
chief the this +'them led AV052

10. $M^{(H^{PnW})} + H^{NW} + Q(DESC^{DemW} + DET^{DemW})$

/ a ŋyiŋi bi naa ga / AP003

his child the this died

" this child of his died "

11. $H^{NW} + Q(DESC^{AdjW} + SPEC^{RelativeSent.Construct})$

/ Gwaa niŋa k'a gin a n a tuu a n gin kina'a /

man other that'he stand he + self distanced he + stand thus'at BC042

"Someone else who just kept his distance and stood and stood like that "

12. $H^{NW} + Q(DESC^{DemW} + SPEC^{Relative\ SentenceCstr.})$

/ Stoori bi ku'moo wu "Ku'm a ka ibii'w" / BC050

yarn the that'I say that'I it give you'to

" the story that I said I would give you "

13 / gi-no boo' kaaku / - "the three dogs" AV022

dog-s thes' three

14. / nyin-no boo' kwaay laafi? / AY005

child-ren thes' all health

" are all the children well?"

15. (NP embedded as M is example) :

$M^{(M^{(H^{PnW})} + H^{NW} + Q(DESC^{DemW} + SPEC^{Quant.Ex^{1}})} + H^{NW}$

/ a ko bi kwaay gilli lu-ban-no /

his country the all toutes woman-crone-s

" every single woman in his village "

---

1 Word-Expressions: see 5.5.1,p.194.

16. H^{NW} +Q(DESC^{AdjW}+SPEC$^{RelSentCstr...}$+DET^{DemW}

/ fo nina k'awo n'i ze-n ... bi / BC005.

thing other that'it +'is come-ing...the

"something else that might come ... "

17. H^{NW} +Q(DESC^{AdjW}+DET^{DemW}+SPEC$^{QuantW.Ex}$)

/ gwaa fu bi kwaay woow / BH011

man white the all entire

" absolutely all the white man "

18. / min naa piiya naa / -"these two examples" BC049

palaver this two this

19. H^{NW} +Q(DESC^{DemW}+SPEC$^{Rel.Sent.Construct}$ +DET^{Dem})

/ Ke naa k'ibii yi nyinta-n bo'o naa/ AX079

room this that'you are sit-ing the'in this

"this very room that you are sitting in "

20. / Lu diini ' n a si / - "one woman ran" AR002

woman one ' + self ran

21. $M(H^{NW})+H^{NW}+Q(SPEC^{NumW})$

/ min-ka yaa diin / - "one single hair"

head-hair seed one BC022

22. / gwoo kwaay ni' ta / - "All the men went" AM003

men all they'+ went

23. $M(M(H^{Pn})+H^{NW})+H^{NW}$ +Q(SPEC^{QuantW})

/ i ko kiibar kwaay / AY002

your country news all

"all the news of your place "

24. H^{NW} +Q(SPEC^{RelSentCstr})

/ gwaa k'a ba naa'w'i / AX043

man that'he notexist this'in'(neg.)

" a man who wasn't here "

25. /boo diin bi gin a wu ... / AV036
blindman one the stood he said ...
"One blind-man upped and said ... "

26. $M^{(H^{Pn})}$ ....+ $H^{NW}{}_{+Q}(SPEC^{NumW}{}_{+DET}{}^{DemW})$
/ nbɔɔn yaa gwaa kaaku naa / AN011
they (excl.) man three this
" these three men, I say ! "

27. $H^{NW}{}_{+Q}(SPEC^{RelSentCstr}{}_{+DET}{}^{DemW})$
/ gwaa k'a ya nyɔɔ sɔ bi / BH017
man that'he him sent also the
" an the man that sent him, too "

28. $M^{(H^{PnW})} + H^{NW}{}_{+Q}(SPEC^{RelSentCstr}{}_{+DET}{}^{DemW})$
/ a nyini k'a ta Kumaas'o bi / AP016
his child that'he went Kumasi'to the
" his child who went to Kumasi "

29. $M^{(H^{PnW})}{}_{+H}{}^{NW}{}_{+Q}(SPEC^{QuantW}{}_{+DET}{}^{DemW})$
/ Guta a suu'w kan a fɔ faan bi ki/
Guta self rule'(it)over with its thing all the too
"Guta's in charge of it and everything in it."

5.3.2.2 - Proper Noun Phrase - Type II.ii: Type II NPs with a Proper Noun (6.2.1.3) as Head have a similar structure to the Noun-Head NPs but only take one Qualifier Element:

5.3.2.2.1 - Elements: Modifier, Head, Qualifier

5.3.2.2.2 - S.F.s: A NP functioning as Modifier optionally precedes the obligatory Proper Noun functioning as Head, which is optionally followed by a Demonstrative, Adjunctive, Adjective or Quantifier Word functioning as Qualifier.

5.3.2.2.3 - Formula:

F.4 $NP.II.ii = \pm NP(M) + PrNW(H) \pm \begin{Bmatrix} AjncW \\ AdjW \\ DemW \\ QuantW \end{Bmatrix} (Q)$

5.3.2.2.4 - Examples:

1. (Head alone)
   // Kaasin yi naa'w // - "Kasim is here" AP001

2. (Head alone - functioning as Modifier in an NP.II.1)
   // Seeku zi bi // - "Seeku's father" AF001
   Seeku father the

3. $M^{(H^{NW})} + H^{PrNW}$
   // kir Ziila // - "chief of Zigila" BG001

4. $H^{PrNW} + Q^{QuantW.Ex}$
   // Nasan-no woow kwaay woow // BH008
   european-s entire all entire
   " all the Europeans "

5. (Head + Demonstrative Q.)

/ Guta naa / - "this Guta " AX049

6. (Head + Adjunctive Q)

/ Dahamaan poori / - "Dahamaani junior" AY004
Dahamaani little

7. (Modifier, Head, Qualifier)

$$M(M(H^{PnW}) + H^{NW}) + H^{PrNW}{}_{+Q}{}^{DemW}$$

/ woɔ ko Guta bi / AX005
our country Guta the

" the Guta from our place "

5.3.2.3 - Raised-Head NP - Type II.iii: The three sub-Types of NP Type II.iii all have structures comparable to the Formula of Type II.i (F.3, p.178) but in place of the Noun Word as Head, one of the Qualifier Elements is raised to function as Head, and its Qualifier can then only be the Qualifier items that can follow it in the Noun-Head Phrase structure. The actually-recorded forms are presented in Table 2, p. 185 below.

5.3.2.3.1 - Sub-Type 1: Adjective Head :

Elements - Head, Modifier

S.F.s - An obligatory Adjective or Adjunctive Word functioning as Head is optionally preceded by an NP functioning as Modifier.

Formula:

F.5 $NP.II.iii.1 = \pm NP(M) + \left\{\begin{matrix} AdjW \\ AjncW \end{matrix}\right\} (H)$

5.3.2.3.2. - Sub-Type 2: Relative Head :

Elements - Head, Qualifier

S.F.s - A Relative Sentence Construct functions obligatorily as Head without Particle marker; it is obligatorily followed by a Demonstrative Word functioning as Qualifier.

Formula -

F.6 NP.II.iii.2 = + Rel.Sent.Cstr(H) + DemW(Q)

5.3.2.3.3 - Sub-Type 3 : Other Head :

Elements - Head, Qualifier

S.F.s - A Demonstrative, Quantifier, or Numeral Word functions obligatorily as Head, followed optionally by a Demonstrative Word functioning as Qualifier.

Formula -

F.7 NP.II.iii.3 = $+\begin{Bmatrix} \text{DemW} \\ \text{QuantW} \\ \text{NumW} \end{Bmatrix}$(H) $\pm$ DemW (Q)

TABLE 2 : Nominal Phrase II.iii

(Readings found in the Corpus)

No.	MODIFIER	HEAD	QUALIFIER
*1		Adjw	
2	NP	AjncW	
*3		DemW	
4		DemW	DemW
*5		NumW	
6		NumW	DemW
7		QuantW	
8		QuantW	DemW
9		RelS.C.	DemW

* see p.175, fn.

5.3.2.3.4 - Examples: (Numbered as Table 2, p.185)

1. // zinda n a yar a n ta'w // AW023
other + self agained he + exist'in
" now there was another one "

2. // a ba a wu i nyinta // AY026
him do he did your sweet
" he makes himself pleasant to you"

3. // A n bi ! // - "That's it !" AJ016
it is the

4. // Naa naa a yi moo mii-yaa bunbo // AV071
this this she is my eye-hole putout
"This here was the one who saved my life"

5. // Diini'n dor sa // - "One took a pot" AJ005
one'+ pot took

6. // Diin bi peen sa // - "the one took a knife" AJ004
one the knife took

7. // kwaay woow naa// - " all these " BC056
all entire this (QuantW.Expression Head)

9. // a n'i bri-si-n k'a ta a ya'a pi bi n // AK007/8
she +'is dash-run-ing that'she go she go'it speak the is
"it is the one who ran off to go and tell about it"

5.3.3 - Nominal Phrase Type III - 'The-One-Who' Phrase :

The Nominal Phrase of Type III takes a Sentence and makes it into a NP with the sense of "the one who..."

5.3.3.1 - Elements: A Head

5.3.3.2 - S.F.s : The obligatory Sentence Construct functioning as Head is marked by the NW (BO4) being selected as Head of its NP(S) and by a final (BI2).

5.3.3.3 - Examples:

1. / bo yi gasu pi bi no, a n fobi-le ba, a n a bi bi /
theone is enter water the belly, he + thing-eat-ing do
he + it eat (sf.) AJ018

" the one who went into the water, cooked food, and ate it "

2. / bo n'i do ma bi / AR017
theone +'is care (him) for (sf.)

" the one who looked after him "

5.3.4 - Nominal Phrase Type IV - Specifying Phrase:

The Specifying NP - Type IV - refers to one of a group present in the linguistic or situational context, specifying it by a descriptive feature (" the ... one ") :

5.3.4.1 - Elements: Head, Qualifier

5.3.4.2 -- S.F.s : The Head is obligatory and consists of a recursive NP with structure:

F.7a $$\pm\ NP(M) + \begin{Bmatrix} AdjW \\ AjncW \end{Bmatrix}(H)$$

(or in one case with such an NP as Modifier). The Head is obligatorily marked by a preceding (A 1) and following (BI 2), and optionally followed by a Demonstrative Word functioning as Qualifier.

5.3.4.3 - Formula:

F.8 $$NP.IV = {}^{A\,1}NP\left[\pm NW(M) + \begin{Bmatrix} AdjW \\ AjncW \end{Bmatrix}(H)\right]^{*}(H)^{BI\,2} + DemW(Q)$$

$$^{*}\ \underline{NOTE}\ \ or\ \ NP\left[NP[\,NW(M) + AdjW(H)\,]\,(M) + NW(H)\right]\ \ (e.g.\ 3)$$

5.3.4.4 - Examples:

1. // a poori bi // - "the little one" AV075
   it little (sf.)

2. // a no polida bi // - "the fat-bellied one" AK004
   it belly fat (sf.)

3. // a gan zarge zaa bi // - " the chap with the tin leg"
   it leg tin owner (sf.) AK014

4. // a min guta bi naa // - "the big-headed one" AK002
   it head big (sf.) this

5.3.5 - Nominal Phrase Type V - Date Phrase:

The Nominal Phrase structure used for giving dates in the European-style calendar is distinguishable as a Type:

5.3.5.1 - Elements: Numeral, Date

5.3.5.2 - S.F.s : (A 1) occurs as initial marker, followed by an obligatory NumW functioning as Numeral (NUML), and (FIN) functioning obligatorily as Date.

5.3.5.3 - Formula:

F.9 NP.V = + $^{A\,1}$ NumW (NUML) + FIN (DATE)

5.3.5.4 - Example:

1. ⁄ a bu-pre-an-neefu fin ⁄ - "the 29th." BG009

5.4 - Other Phrase Structures:

5.4.1 - The Verbal Phrase:

5.4.1.1 - Elements: Head, Relational Qualifier

5.4.1.2 - S.F.s : A Verb Word functions obligatorily as Head, followed optionally by a Relator functioning as Relational Qualifier (RelnQ).

5.4.1.3 - Formula:

F.10 VP = + VW (H) ± Rr (RelnQ)

NOTE: If it is necessary to refer separately to the sub-Type in which the RelnQualifier is present, we use the term "Verb-Relational Phrase"

5.4.1.4 - Constructional Homonymity: There is C.H. in the case of the string:

F.11 X - VV - Rr - X [1]

between the instance where it is a Verb-Relational Phrase (see F.10 NOTE, above) and that where it derives from:

F.12 X - VP - NP(IO or LOC) - Rr(SF) - X [2]

with a minimal VP structure and the NP having a 3rd. Singular Pronoun as its exponent[3] with zero representation before the Relator[4].

5.4.1.5 - Examples:

Simple VP:

1. / A ma / - "It is ready." AC002
   it ripened

2. / a da sii-da'w / - "he rode a mare" AF001
   he rode horse-female'on

(functioning in Root of Nominalized Word-Stem: 6.3.1.3.3):

3. / fodo-le zaa / - "wise man" BC034
   thing-know-ing

Verb-Relational Phrase:

4. / Oh ! A a to'w . / - "Oh, he tried !" AV057
   (excl.) he self strained-at

---

1 Where 'X' marks irrelevant context

2 F.12 would be derived from V.Cl. II or III - 4.4.2.2/3, or V.Cl.I with Locative in the Periphery - 4.4.2.1

3 Pronominal NP see 5.3.1 above: 6.4.3 below.

4 Zero representation - 1.4.3.3.4 vii & e.g. 24: p.45

5. // a par bi ko la bɔ n 'i ? // AX032
his house the covered over what with'(?)
"What is his house roofed with?"

(in Nominalized Word-Stem)[1]:

6. // fodo-le-ka-n-ma // BH003/4
thing-know-ing-search-ing-for
"the search for knowledge"

5.4.2 - Adjunctive Phrase:

5.4.2.1 - Elements: Descriptive Head, Degree (DEG)

5.4.2.2 - S.F.s : An Adjunctive Word functions as obligatory Head, and is optionally followed by an Intensifier Word functioning as Degree.

5.4.2.3 - Formula:

F.13 AdjncP = + AjncW (H) ± IntW (DEG)

NOTE: C.H. - see 5.4.3.4 below.

5.4.2.4 - Examples:

1. // Bi van . // - "He's useless !" AJ020
that (is) empty

2. // A ta mɔɔ ma nyinta. // AV003
it exist me for sweet
"It would be nice for me."

---

[1] The Object is an embedded Nominalized Word - cf. e.g. 3

3. ⟨ Sara-baa bi miŋa ⟩ - "It was good fun." AB003
play-ment the (was) good

4. ⟨ A nyiŋba baa. ⟩ AB003
it (was) sweet very

5.4.3 - The Adverbial Phrase:

5.4.3.1 - Elements: Manner (MANN), Degree(DEG)

5.4.3.2 - S.F.s : An Adjunctive or Adverbial Word or an Ideophone (see Appendix E) functions as Manner; an Intensifier Word functions as Degree. Either Element may occur alone or both may occur in the above order.

5.4.3.3 - Formula:

F.14 $$AP = \pm \begin{matrix} AjncW \\ Id \\ AdvW \end{matrix} \text{ (MANN) } \overset{\text{and/or}}{\overline{+}} \text{ IntW (DEG)}$$

5.4.3.4 - C.H. : a) There is C.H. in the case of the string:

F.15 $$X - AjncW \pm IntW - X$$

between the instance which is an exponent of AP and that which is an exponent of AdjncP (F.13). This is ambiguous if nothing (except Temporal in a V.Cl.) follows the string in the Clause (if something follows, this string cannot be an AP). There may also be some cases where such a string is unambiguously an AdjncP because sense or structure require it to be Complement or Comment.

b) There is also C.H. in the case of the string:

F.16 Cl.NUC. - AdjncW - ± Cl.PERIP.

- in this the Adjunctive Word may be:

i) A Descriptive expansion of the NP Subject or Object, in this position throught NP-splitting (4.4.4, p.156 and examples there).

ii) A minimal AdjncP functioning as Equative Complement or as Comment if the Clause-Type can be V.Cl.II or N.Cl.I/II.

iii) A minimal AP if no peripheral AP follows.

5.4.3.5 - Examples of AP :

1. (AjncW):

/ A yaada-ni' miŋa / - "You greet him well." AY054
you greet-willto' good

2. (AjncW):

/ A nyii ba woo n poori / A0006
they fear do us for little

" they fear us a little "

3. (AjncW + IntW) :

/ A zi ba miŋa paa / AY012
he work did good very

"He has worked very well."

4. (AdvW) :

/ moo n ta zoo / AW031
I + go quickly

5. (AdvW) :

/ a n tr'a na ko'w ka-kaaku / AW032
he + usually'them put gether'to thr-three

"he kept gathering them together three at a time"

6. (AdvW + IntW) :

/ ibii mii ba fo ra / BD008
you palaver do even very

" you even go chattering on "

7. (Id.) :

/ a n a zor firinn / AT008
she + him washed zot !

" she washed him all over "

8. (Id. + IntW) :

/ Fiigaaa toke? / - "Never at all?" BA005
ever atall

9. (IntW) :

/ A nyii ba-ni' paa / AX067
you fear do-willfor' very

" you're scæred stiff of him !"

5.5 - Word-Expressions and Rankshifted Phrases

5.5.1 - Word-Expressions:

There are some cases where a complex Word-Expression (cf. p.47) is substitutable for a single Word in the Phrase-Rank Formulæ above. These concern more-specially delimited groups of Words than is the case with NP- and Clause- Expressions (4.4.3,p.153;3.1.2,p.105).

5.5.1.1 - Numeral Word-Expressions: Numerical approximation is indicated by a NumW-Expression with:

a) A NumW Initial, followed by one or two NumWs Alternative each preceded by the Particles (OO) or (KOO 3) as marker.

or b) A NumW Approximation preceded by the Particle (BAN 2).

Examples:

1. / Kun la ba diin koo piiya / AH002
that rain do one or two
"when it has rained once or twice"

2. / a zɔ gor piiya oo kaaku oo si / AZ006
he fish gather two or three or four
" he caught two, three or four fish "

3. / gwaa bi nyinta dɔ-min ban kaaku / AV064
man the sat day-head about three
"the man sat there for about three days"

5.5.1.2 - Adjective Word-Expressions: The sub-Class of Colour-Adjective Words (AdjW A - C, 6.2.1.4) may enter into an Expression structure which then functions like a single AdjW. The examples are from written conversations and elicited material. The colour AdjW may be followed by:

/ fu / - "pale" ; / kun-da / - "dark";
or / me / - "medium" (lit. "body").

- the first two of these terms may also be

used as Colour AdjWs ("white" and "black"), in which case they may not be qualified in this way. There may further follow:

/nyino-nyino-da/ - "shiny"; or /paa/ - "intense"

Examples:

1. / a bunbwee-da paa / - "it is intense red"

2. / a bunbwee-da nyino-nyino-da / - "it is shiny red"

3. / yonu paa naa / - "strong green, that is"

4. / bula fu n / - "it's pale green"

5. / bula me / - "medium blue-green"

6. / bula kun-da paa / - " intense dark blue-green"

5.5.1.3 - Quantifier Word-Expressions: Quantifier Words may be grouped into expressions to intensify their sense. /kwaay/ acts as centre and may be preceded and/or followed by /kwaay/ or /woow/ or followed by /gilli/[1] :

Examples:

1. / min-bo-le zaa bi leda kwaay-woow / ANO25
eye-out-ing owner the excel all entire
"the resurrection man beat them all"

2. / a ko bi kwaay gilli lu-ban-no / AWO35
his country the all toute women-crone-s
"every single woman in his village"

---

[1] A loan word from Moré.

3. /Nasan-no woow kwaay woow min to ma/ BH008
European--s entire all entire palaver name for
"for the sake of absolutely all the Europeans"

4. /a n lan--no bo kwaay kwaay kwaay/ AW034
he + women putout all all all
" he brought out every last woman "

5.5.1.4 - Proper Name Expressions: Some Proper Nouns functioning in NP Type II.ii - as personal names - are expressions of several Words. The pattern is basically a specific name followed by a general name. In the Arabic pattern the particle /ibn/ is inserted between these (e.g. 4), in the European style initials may be (e.g. 3), while in the indigenous pattern a locality may be.

Examples:

1. /Ingiliis Nasaara/ - "English European" BG013

2. /Muusa Bandaaw/ - "Musa Bandaogo" BG033

3. /Deevid dii ess Banka/ - "David D.S.Banka" AN001

4. /Idriisu ibn Muusa/ - "Idrissu ibn Musa" BH018

5. /Loorenz Ziila Bandaaw/ - "Laurence Bandaogo of Zigila" BG044

5.5.2 - Rankshifted Phrases:

5.5.2.1 - RS Nominal Phrases: The NP which enters into Split-NP constructions (4.4.4, p. 156) and recursively into the structure of Nominal

Phrase of Types II and IV (formulæ 2 - 4, 8 above) is a Pronoun- or Noun-Head NP (Types I and II). There is an additional restriction on the NP functioning as Head of NP Type IV: - it must be:

F.17 NW(M) + Adj/AjncW(H)

only, or have an NP of this structure as Modifier to (ZAA 2) in a Type II.i NP.

Similarly the NP which enters into the structure of NP Type II.i as post-AdjW in the Descriptive Qualifier (F.3, p.178) is limited to:

F.18 NP(M) + ZAA 2 (H)

5.5.2.2 - RS Verbal Phrases: There does not seem to be any systematic restriction as to which VPs may function in the Nominalized Word-Stem (6.3.1.3.3, p.221), but as this is a derivational Word-formation there is probably lexical control restricting the free generation of such constructions.

5.6 - Phrase-Rank Systems:

At Phrase Rank there are few closed choice-sets of the System type. Those that are present apply separately to different Classes of Phrase:

5.6.1 - The NP System: Number

The System that has the NP as its domain is the Number System with terms Singular and Plural. The Singular is the unmarked term.

A Nominal Phrase may be marked as Plural by:

1) The selection of a Plural PnW, NW or NumW as Head (cf. 6.4.2, p.228).

2) The selection of a Plural NumW, or of a Plural AdjW or AjncW in the Qualifier.

3) The selection of a QuantW in the Qualifier, though there are a few Head NWs which are lexically (rather than syntactically) 'Mass' and with which QuantW means "the whole of" rather than "all the (pl.)".

4) Additionally and optionally by the selection of a Plural DemW in the Qualifier. The Plural NumWs /piiya/ and /kaaku/ may additionally take a plural suffix (6.4.2).

Examples:

1. Singular (PnW, also NW):

/ ibii kan gwaa ki / - "you with the man" AY015

2. Plural (Pl. NW):

/ gwɔɔ min dɔ / - "people know the matter" AY040

3. Plural (Sing. NW/AdjW/DemW + QuantW-Ex):

/ gwaa fu bi kwaay woow / "all the white men" BH011

man white the all entire

4. Plural (Sing.NW - Pl.NumW - Sing.DemW)

/ gwaa kaaku naa / - "these three men" AN011

man three this

c.f. 4.a / gwaa diin bi / - "the one man" (sing.) AW033

and e.g. 10 overleaf.

5. Plural (Sing.NW - Pl.AjncW):

/ bɔnita gandaa-rɔ n / AU012

monster great-s was

"they were enormous monsters"

6. Plural (Pl.PnW):

/ n a keeso'w / - "they scrape it off" AC003

they it scrape'off

7. Plural (Pl.NumW (H)):

/ n piiya / - "they (are) two" AW003

8. Plural (Inflected Pl.NumW(H) + Pl.DemW(Q)):

/ piiya-nɔ bɔɔ' / - " the two" AR011

9. Plural (Pl.NW - Sing.AjncW):

/ gwɔɔ ... guta / - "many men" AM006

10. Plural (Pl.NJ - Pl.NumW(infl.) - Pl.DemW):

/ gwɔɔ kaaku-nɔ nɔɔn / - "those three men" AN011

men three-s those

5.6.2 - VP System: Tense

The only System relevant to the VP is the Tense System. This is primarily a Clause-Rank System (4.5.5, p. 163), but it is often the case that higher-ranking Systems have exponents at lower Ranks which reflect the Systemic choice. The marked Non-Past term of the Clause-Rank Tense System is normally marked by the selection of a Non-Past Verbal Phrase as its Predicator, which itself

is marked by the selection of a Non-Past Verb Word (6.4.1) as its Head.

Examples:

Past:

1. ⟨ A da sii-da'w ⟩ AF001
   he rode horse-female on
   "he rode a mare"

2. ⟨ a ya tunto'w ⟩ BH009
   he self tried'at
   "he made an attempt"

Non-Past:

3. ⟨ n br'a da-le ibii zi ⟩ AE003
   they not'self drop you toward
   "they won't take any notice of you"

4. ⟨ mɔɔ yɛ̀ nyibɔ-n'o ⟩ D.I. note on AM019
   I amɨt answer-ing'to
   "I am answering"

CHAPTER 6 - THE WORD

6.1 - Introduction: Word Function

Word Rank as described in this Chapter is a purely syntactic Rank, defined as that at which the Units have a Structure of Elements whose exponents are Morphemes , and normally function as exponent of Elements of Phrase-Rank Units. The Word in Bisa has no Phonological correlate, and we are not taking into consideration here the complex correlations between the Syntactic Word and the comparable Units in Semantics or Lexicography - the 'Concept' (see. pp. 57 ff.) and Dictionary Word.

As Words thus function in the Phrase they have a primary division into Classes on the basis of these

functions - into Noun, Verb and so on, these Word-Classes roughly corresponding to the traditional "parts of speech". There are, however, various sub-classifications of the Word in Bisa which are of relevance in distinguishing different Structures and Systems at Clause and Sentence Ranks (Syntagmatic Feature of Selection, see p.36). These are presented under the main Class-headings in section 6.2 below.

At Word Rank there is cross-cutting of functional and structural criteria. The structures outlined in 6.3 below have names which reflect their structural shape - Simple, Reduplicated etc. - and each form is normally found amongst members of several different Classes.

6.2 - Functional Classes of Word:

6.2.1 - The Nominal Word-Classes:

We group in this section all those Words whose sole function is within the Nominal Phrase. They are further divided into Classes in accordance with their various functions in the NP and its Types and sub-Types.

6.2.1.1 - Pronoun Word: The Pronoun Word (PnW) functions as Head of the NP of Type I. The Pronouns are by far the commonest Words in Bisa in terms of tokens in the Corpus. For the Person/Number Systems of Pronouns see 6.4.3, p.230 . Structurally the PnW is either Simple or Compound.

6.2.1.2 - Noun Word: The Noun Word functions only as Head of a NP of Type II.i . NWs may be sub-classified under three simultaneous criteria:

a) Those which require a Relator as marker if they are in Relational function (IO, LOC, TEMP in V.Cl.; COMM in N.Cl.III); those which are never so marked; and the remainder where the marker is optional.

b) Those which only function as NP(O) in the V.Cl., and those with other functional options in addition.

c) Those which are exponents of the Interrogative System (pp. 157, 159) and those which are assertive.

There are a few special NWs in addition. The sub-Classes yielded are:

A - Head of NP, also with special functions q.v. 5.5.2.1, p.198. Assertive: marked if Relational:-

(ZAA 2) - "owner"

B - Only as Head of NP(O); Assertive:-

(KARENDA) - "reading"
e.g. /́ a karenda ba /̀ - "he read"
he reading did

(NYII 2) - "fear"
e.g. /́n nyii ba woo n /̀ -"they fear us"
they fear do us of (A0006)

(LAAKA) - "enquiry"
e.g. /́a n laaka da/̀ - "he asked"
he + enquiry drop (AU011)

C - IO/Locative, without Relator:

a) Interrogative: (KA 2), (BII) - "where?"

NW sub-Class C.a: e.g. /ta ibii ka'y?/ (AX003)
"where are you going?"

/tɛan bii?/ -"where's the bowl?"
bowl where (BE002)

b) Assertive: (BISI 2) - "right"
(GISA) - "left"

e.g. /a n ger ze bisi kan gisa ki/
he + corpse hit right with left too
"and killed them right and left"

D - Temporal only, no Relator:

a) Interrogative: (BUDƆ) - "when?"

e.g. /daasi n budɔ'ɔ?/ (written)
market is when'(?)
"when is market (-day)?"

b) Assertive: (BIISI) - "long-ago"
(GIN 4) - "yesterday"
(ZIZIR)) "day after tomorrow"

e.g. NP(Ø)-sf-VP(PD)-NP(TEMP)
/gwaa yi nyinta biisi/ (AP002)
man is sat longago
"once upon a time there was a man"

E - General Nominal function; Temporal no Relator; Assertive :-

(DƆƆLAA) - "year" (MUN 2) - "month"
(DIITAA)[1] - "now" (TEN) - "time"
(DƆ4-MIN 1) - "day" (ZIR 1) - "next day"
(FIR 1) - "today"

e.g. /fir fo/ - "today's thing"
cf. /do bri mi fir/ - "day will not dawn today" (AU025)

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[1] variant (DIINAA), also doubled, see 6.3.1.3.1

NW Class: F - All Noun functions; Assertive; Relator optional in Relational functions:

(GIN 1) - "night" (LAAFI) - "health"
(KINA) - "thus" (PAR) - "house"
(MIN 3 - TƆ 1) - 'name of matter' = "sake"

e.g. /Laafi ta'w/ - "all's well" (AG003)
health (NP(S)) exist'in

/Wusu laafi ka-n/ - "God grant health"
God health (NP(O)) give-will (AY060)

/woɔ yi naa'w kan laafi ki/ (AG003)
we are this'at with health too (+Rr)
"we here are well"

/Wusu lee ko-le i n laafi/ (AY061)
God place reach-will you with health
"God will bring you there in safety"

G - All Noun functions; Relator obligatory in Relational functions:

a) Interrogative: (BƆ 1) - "what?"
(NKA) - "who?"
(KALE) - "which?"

e.g. / bɔ n ta'w / (AS026)
"what (+) is there?"

/bɔ a n a ba-n bɔ'ɔ?/ (AX007)
"what is he (+ it) doing there?"

/ a par bi ko la bɔ n'i?/ (AX032)
his house the cover over what with(?)
"what is his house thatched with?"

b) Assertive: All other Nouns

6.2.1.3 - Adjective Word: The Adjective Word (AdjW) functions as Descriptive in NPs of Type II.ii, and as Head in Type II.iii.1 . There are sub-Classes according to function in the Colour-Adjective Expression (5.5.1.2, p.195 f.):

A - Alone, or in second place in Colour-AdjW-Expression:

(FU) - "white,light"; (KUN-DA 3) - "black, dark"

B - Alone, or in final place in Colour-AdjW-Expression:

(NYINƆ-NYINƆ-DA 3) - "shiny"

C - Alone or in first place in Expression:

(BULA 1) - "blue, green"
(BUNBWEE-DA 3) - "scarlet red"
(KINƆƆ-DA 3) - "pink"
(SI 8 ± DA 3) - "brownish red"
and others.

D - Not in Colour-Adjective-Expression: "General Adjectives":

(GANQA) - "skinny"
(GIDI) - "uncooked, unripe"
(GINTA) - "long, tall"
(GUSI-LE 5) - "old"

and others.

6.2.1.4 - Qualificatory Words: These function in the Qualifier in NPs of Types II.i and II.ii, and as Head in Type II.iii.3 : there are three sub-Classes:

A - Numeral Word: In Specifier of NP II.i; also enters into Numeral Word Expression (5.5.1.1, p.195) :

(DIIN) - "one"
(BWELE-PIIYA) - "twelve"
(BU 1- PRA-AN2-NEEFU) - "twenty nine"
and others.

The NumW has its own characteristic Types of Complex Stem Structures: see 6.3.1.3.4, pp. 222 ff.

B - Demonstrative Word: In Descriptive or Determiner of NP II.i: additional functions as Qualifier of NP II.iii.1 + 3 and NP V. The deictic and anaphoric functions of the DemW would need detailed treatments of Ranks above the Sentence to make their description possible.

(BI 1) - "the, that"
(KƆNQI) - "that"
(NAA 1 ± DUU4) - " this (-here)"
(NƆƆ)/(NƆƆN 1) - " those, these "

C - Quantifier Word: In Specifier of NP II.i; enters into QuantW-Expressions (p.196). When head of a Relational NP it does not have a Relator as marker:

(FAAN), (GILLI), (KWAAY), (TUU 3), (WOOW) - "all"

6.2.2 - Adjunctive Word:

The Adjunctive Word functions in the NP in the same ways as the Adjective Word (p.207); specifically the General Adjective (sub-Class D). It may also, however, function as Head of the Adjunctive and of the Adverbial Phrases (5.4.2/3, pp.191 ff.). This comprises a small

group of frequently-used Words, usually of less of a specialised meaning than the Adjectives. Those in the Corpus are:

A. - Assertive:

(GANDAAW)	- "great"	(NYINTA 2)	- "sweet"
(GUTA)	- "big, much, many"	(POORI)	- "little"
(MINDA 1)	- "good"	(VAN 1)	- "empty"

B. - Interrogative:

(KALƆ) - "how much?"; (LƆ 4)/(LUNLƆ) - "how, why?"

6.2.3 - Adverbial Words:

The Adverbial Word functions in the Adverbial Phrase. we treat here of the Adverb and the Intensifier; the Ideophone is a special case and is covered separately in Appendix E.

6.2.3.1 - The Adverb Word: The Adverb Word (AdvW) functions only as Head of the Adverbial Phrase. The members of this Class seem to divide etically into a group of frequent Words of general meaning and a group of rare Words with more specialised sense: - this dichotomy would parallel the Adjunctive/Adjective contrast. There are no formal distributional criteria for such a division, however: in a larger Corpus we might look for such evidence in terms of the collocations of the second group with specific Verb Words:

A - General Adverbs: (BOY) - "easily", (KA-KAAKU) - "three at a time", (KEEDE) "then" (logical > temporal), (SƆ 1) - "also", (SUNSA) - "again" and others.

B - Special Adverbs: (GENNI) - "wobble", (SA 5) - "fair and square", (ZAN) - "gulp !"

6.2.3.2 - The Intensifier Word: The Intensifier Word (IntW) functions as Degree in AdjncP and AP_s and as Head of AP_s. It also functions in final place in the Colour-AdjW Expression (p. 195). The only IntW of any frequency of occurrence is (PAA 3). Other Intensifiers are probably specialised in collocation - as in the examples p.192, 4; p.193, 3; p.194, 6 + 8 .

6.2.4 - The Verb Word:

The Verb Word (VW) functions only as Head of the Verbal Phrase. There are a large number of sub-Classes which may be set up according to participation in various combinations of higher-Rank structures:

1) As SF of Sentence-Type IV (3.1.1.4, p.103 f.)
2) As SF of Auxiliary Clause-Sequence Expression (3.1.2.2, p.107)
3) As SF of Quote-Auxiliary in Quote-Sequence Clause-Expression (3.1.2.3, p.109)
4) With various combinations of V.Cl. Elements: Object, Subject, Indirect Object, Equative Complement, Sentential Comp. (4 types) - (4.4.2, pp.142 ff.)
5) With the Sentence-Rank System of Motion (3.1.4.2, p.117 ff.)

The combinations described as characteristic of the sub-Classes are not necessarily obligatory for every occurrence of the Verb in Question, indeed the formulæ for the higher Ranks will show that in some cases they cannot

co-occur in the same structure: the sub-Class descriptions show that the Verb Word in question have been found with each of the defining characteristics in permitted combinations. Table 1 shows the sub-Classes arranged on the dimensions of Transitivity and of the other special functions.

VW Class A: Intransitive (Non-Motion) - No Object, Indirect Object, Or Equative Complement:

A.a - Only in Bokale Clause of Sentence IV: (BOKA)

A.b - Only Auxiliary (3.1.2.2) : (YUKU), (YUN)

A.c - Only Quotative (4.4.2.4, IV.i, p.150): (W) - "say"

A.d - Also with Condensed Complement (p.153): (SOR)"do also"

A.e - General Intransitive: (BAADA) - "cry", (GA 3) - "die", (GUSI) - "be old", (LA 4) - "live", (FO 2) - "blow" (wind), - and others.

VW Class B: Intransitive (Motion):

B.a - Also Motion Auxiliary (3.1.4.2.1, p118): (A 4) -"go" (BI 4)- "come"

B.b - General Motion Intransitive: (BINBIR) - "wander", (PIR) - "jump" - (TARSO)[(O)][1] - "slip" - and others.

VW Class C: Transitive (Non-Motion) - Object, but no IO,EQ.COMP:

C.a - Auxiliary only: (YAR 3) - "do again",(TUU 4) [R][2] - "do from a distance"

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1 Relator in brackets: Verb enters Verb-Relational VP (p.189)

2 [R] indicates 'Reflexive': Object is Pronoun co-referent with NP(S).

C.b - Also Sentential Complement with (K), preposed:
(DƆ 1) - "know"

C.c - Also Quotative: (MA 5) - "hear, understand"

C.d - Also Quote-Auxiliary: (GIN 2) - "stand", (LAR) - "ask"

C.e - Also with Neutral Sentential Complement (p.152):
(KA 6) - "cause", (GA 4) - "be better", (TEEDAKA) - "think".

C.f - General Transitive: (BI 3) - "eat", (BINBA) - "do repeatedly", (PA 1) - "fill" (NYIBƆ) [(O)] - "answer",
- and others.

VW Class D: Transitive (Motion):
(BUSU 1) - "lift, carry", (FER)[R] - "go away", (SI 4)[R] - "run", (ZE 3)[(O)] - "meet"
- and others

VW Class E: Semi-Transitive (Non-Motion) - IO; no O, EQ. :

E.a - Also Auxiliary : (GƆƆTA) - "stay"

E.b - Also with Purpose Sent.Comp. (p.152); Negative VW (p.160) : (BA 2) - "not exist"

E.c - Also with Neutral Sent.Comp. : (BƆKO) - "resemble"

E.d - General Semi-Transitive : (LEDA), (NOKO) - "excel", (GOO) - "look into",
- and others.

VW Class F: Semi-Transitive (Motion):
(BILA) - "cross", (BOR) - "come", (DIR 2) - "climb", (DOO) - "go home", (TA 1) - "go",
- and others.

VW Class G: Ditransitives (Non-Motion) - O and IO, no EQ :

G.a - Also Auxiliary and with Purpose Sent.Comp:
(KA 3) - "give, allow", (KA 5)[R]- "search"

G.b - Also Neutral Sent. Comp. : (DAMA) [R] - "be able"

G.c - General Ditransitive: (GWEE) - "throw", (NO 4) - "touch", (SI 3) - "receive", (TO 5) - "pour", and others.

VW Class H: Ditransitive (Motion):

H.a - Also with Purpose Sent.Comp. : (TUU 2) - "leave"

H.b - General Motion Ditransitive: (BO 2) - "go/take out"
(DA 4) - "drop, fall"
(GAA 1) - "lead"
(KU) - "reach"
- and others.

VW Class I: Equative[1] - No O or IO but with Equative Complement:

I.a - Also with Condensed Sent.Comp.: (DOR) - "continue"

I.b - General Equative: (NYINTA 1) - "sit, be, become"

VW Class J: Creative - O and EQ, no IO :
(LOR) - "change (into)", (WUU 2) - "divide(into)"

VW Class K: Semi-Creative - IO and EQ but no O :

K.a - Also with Neutral Sent.Comp.: (DIGA) - "look at/upon"

K.b - Also (with (LE 2) as NP(S)) with Purpose Sent. Complement : (TA 2) -"exist, like"

K.c - General Semi-Creative: (YAADA) - "greet"

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[1] Only Non-Motion VWs occur with Equative Comp. (Class I - L)

VW Class L: Dicreative - O, IO and EQ. :

L.a - Also with a range of special constructions with NP(O) (DAAMA), (DAANDA), (TOLLI) and Adverb (LO 4) - Auxiliary, or with Sentential Comp: (BA 1) - "do, make, become..."

L.b - Also Quote-Auxiliary and Quotative: (PI 2) - "speak"

L.c - General Dicreative: (BIL 1) - "call", (SI 2) - "buy"

	Non-Motion							Motion		
				V.Cl. IV						
	Gen	Aux	Q Aux	(QOT) i	ii	iii	iv	Gen	Aux	V.Cl. IV.ii
Intransitive	A.e	A.b		A.c			A.d	B.b	B.a	
Transitive	C.f	C.a	C.b/d	C.c	C.b			D		
Semi-Trans.	E.d	E.a			E.b	E.c		F		
Ditransitive	G.c	G.a			G.a	G.b		H.b		H.a
Equative	I.b						I.a			
Creative	J									
Semi-Creat.	K.c				K.b	K.a				
Dicreative	L.c	L.a	L.b	L.b		L.a				

TABLE 1 - Verb Word Classes

6.2.5 - The Relator:

The Relator functions as an Element in the VP and as a SF of Indirect Object, Locative and Temporal in the Verbal Clause and of Comment in the Nominal Clause of Type III. The Relator (KAN) ... (KI 1) also functions as Conjunction oin the Coordinate NP-Expression (4.4.3.1, p. 153). Relators are:

(KAN) ... (KI 1), (LA 2), (N 3), (MA 1), (O) and others.

6.3 - Word Structure:

Word Rank in Bisa is an ill-formed one (see p.46) all but 9% of the types in the lexicon are Simple and without suffix -- their structure is formed by singulary branching (loc. cit.) and thus comprises a single Morpheme. In terms of tokens in the Texts of the Corpus the proportion falls to 4.5% .

There is layering within the structure of those Words which do have a pluri-morphemic composition (cf. 4.3, p.134): the Word consists of a Stem optionally followed by a Suffix. Again, the majority of the Stems are Simple, but they are in some cases Compounds - endocentric structures of two or more Morphemes of the same Class. Others are Complex, with some sort of nucleated structure and possibly with exocentric function. Within the Complex Type we recognise a number of sub-Types in accordance with the specific structural organisation involved.

The basic layering formula is thus: ('Mp' = Morpheme)

F.1 $W = + [\pm Mp + Mp \pm Mp\ (STEM)] \pm Mp(SX)$

The various Types of structure are detailed below.

6.3.1 - The Word-Stem:

6.3.1.1 - The Simple Stem: The **Type I** Stem consists of a single Morpheme functioning as Root. There are two sub-Types according to whether the Stem accepts, or does not accept, a Suffix. Simple Stems are found in all Word-Classes:

Examples: Simple Stem, No Suffix:-

1. /ˊ bee ˋ/ - "beer" (AC001) - Class: NW G.b
2. /ˊnyinta ˋ/ - "sweet" (AB003) - Adjunctive A
3. /ˊ bor ˋ/ - " come" (AG005) - VW F
4. /ˊ so ˋ/ - "also" (AJ015) - Adverb A
5. /ˊbaa ˋ/ - "very" (AB003) - Intensifier

Simple Stem: may have Suffix :-

6. /ˊ kemma ˋ/ - "elder brother" (AG001) - NW G.b
6.a /ˊ kemma-ro ˋ/ - "elder brothers" (AB001)

7. /ˊ kaaku ˋ/ - "three" (AJ001) - NumW
7.a /ˊ kaaku-no ˋ/ - "three (pl.) (AM011)

8. /ˊ guta ˋ/ - "big" (AJ016) - AjncW
8.a /ˊ guta-baa ˋ/ - "greatness" (AX034) - NW G.b

9. /ˊ ze ˋ/ - "come" (AB002) - VW D
9.a /ˊ ze-le ˋ/ - "will come" (AG004)

10. /ˊ kasi ˋ/ - "basket" (AS020) - NW G.b
10a /ˊ kasi-re ˋ/ - "little basket" (AT011)

6.3.1.2 - The Compound Stem: The Compand Stem - Type II - comprises two Morphemes, one or both of which may also occur as Simple Stems. All Compound Stems are Nominal Word Stems and in may take the Nominal Plural Suffix (6.4.2).

6.3.1.2.1 - Elements: Initial Root, Final Root

6.3.1.2.2 - S.F.s : A Morpheme of Stem-Base Class A - D, F (see 7.3.1.2 below) functioning

as Initial Root is followed by Cpd.- a Stem-Base A, B, E or G which functions as Second Root. The structure is further marked by adaptations to the Initial Root:

a) Final /-r/[1] becomes /-l/ before /l-/

b) Final /-r/ becomes /-n/ before /z-/ and /ny-/

c) (KUR 2) becomes /kuu-/ before /-yaa/

d) (DA 1) becomes /daa-/ before /-da/

e) (FƆ 1) may become /fii-/ before /-yaa/

f) (MIN) becomes /mii-/ in all cases

g) (LE 2) becomes /lee-/ before /-min/

h) /-n-/ is added between Roots:

(GA 1) and (GIR 1)
(LE 1) and (-FEER)
(PISA) and (BUR)
(WƆ 1) and (-PIIN)

i) The Vowel of the Initial Root is repeated between:

(KAR 1) and (NYIISI)
(YIR) and (YAA)/(GIRI)

6.3.1.2.3 - Formula:

F.2 $\quad CpdSt. = +Bs^{\{A,B,C,D,F\}}_{Mp}(InitRt)+Bs^{\{ABEG\}}_{Mp}(SecRt)$

NOTE: This, as also the other Stem-structure formulæ, is not a generative formula. These are derivational structures, and the Lexicon and Morphophomenics determine permitted combinations and adaptation rules.

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[1] Except as below: (KUR 2)(YAA) - c. ; (KAR 1)/ (YIR)- i.

6.3.1.2.4 - Examples:

1. /bil-lur/ - "young female goat" AU017 : /bir/ - "goat"
2. /kun-zeen/ - "young shea-tree" BB009 : /kur/ - "shea"
3. /kuu-yaa/ - "shea nut" : /yaa/ - "seed"
4. /daa-da / - "maternal grandmother" : /da/ - "mother"
5. /fo-yaa/, /fii-yaa/ - "millet " AX006 : /fo/ - "thing"
6. /mii-si/ - "any trouble" AY007 : /min/ - "palaver" /si/ - "any"[1]
7. /mii-yaa/ - "eye" or "skull" : /min/ - "eye" or "head" /yaa/ - "hole" or "bone"
8. /lee-min/ - "language" BH011 : /le/ - "mouth"
9. /gan-gir/ - "guinea-fowl egg" : /ga/ - "g.fowl" /gir/ - "egg"
10. /won-piin/ - "finger" : /wo/ - "hand"

6.3.1.3 - The Complex Stem: The Type III Stem is a Complex structure, of which there are several sub-Types:

6.3.1.3.1 - The Doubled Stem: Type III.i :

Elements: Root and Repeat

S.F.s : The same Base Morpheme (see 7.3.1.3.1) functions as both Root and Repeat. This structure is not common but examples occur in several Classes of Word, particularly AdjW qnd AjncW.

F.3 Formula: $St.III.i = +Mp^{DblBs}(Rt) + M\overline{p}^{=}$ (Repeat)

NOTE: The raised $^{=}$ means the same Mp as the foregoing.

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[1] See 4.5.3.6, p. 160

Examples:

1. /gweli-gweli/ - "pretty-pretty" - AS023 - Class: AdjW D
2. /kur-kur/ - "pig" - BB004 - NW G.b
3. /diitaa-diitaa/ - "right now" - AY057 - NW E
4. /zolɔ-zolɔ/ - "by hundreds" - AW031 - AdvW
5. / zi-zi / - "around" - AX094 - Relator
6. /poori-poori/ - "little-tiny" - AW038 - AjncW A

6.3.1.3.2 - The Reduplicated Stem: Type III.ii - The Reduplicated comprises a Root preceded by an additional syllable derived from the Root by Morphophonemic process:

Elements: Root, Prefix

S.F.s : A Reduplicated-Base Morpheme (7.3.1.3.2) functioning as Root preceded by a Prefix Syllable such that:

a) The initial Consonant of the Px. is the same as that of the Root.

b) The Vowel of the Px. is /-ɔ-/ with Root (GU 2); it is /-u-/ with Roots: (BUSU 1) - "hurt", (DU 2) "drop" (WUSIGA) - "turn" and w and with Roots with Vowel /-ɔ-/ in their first syllable; it is /-i-/ with other Roots.

c) The Prefix ends with a Nasal Consonant.

F.4 Formula: St.III.ii = +Px.(SF)+ $M_{\bar{p}}^{RedBs}$(Rt)

F.5 Px. = C^1V^1N- where Rt.= C^1V^2... (for V^1 see above)

NOTES: a) The prevailing semantic sense of the Reduplicated Stem is plurality: most commonly a Reduplicated Verb-Stem indicates the action of the Root performed repeatedly and/or by plural Subject and/or upon plural Objects. There are other senses, however, lexically determined.

b) There are some comparable items without the final Nasal of the Prefix:

/kaaku/ - "three" : / ka-kaaku/ - "by threes"
/ zir / - "next day": /zi-zir/ - "day after tomorrow"

c) The regular Reduplicated Stems function in the same Word-Class as their Roots.

Examples:

1.	/ba/	- "do"	:	/binba/	- "do repeatedly"
2.	/busu/	- "hurt"	:	/bunbusu/	- "hurt all over"
3.	/ da /	- "mother"	:	/dinda/	- "mother-in-law"
4.	/ fo /	- "thing"	:	/funfo/	- "different th."
5.	/ ga /	- "die"	:	/ginga/	- "die"(pl.subj.)
6.	/geer/	- "courtyard"	:	/gingeer/	- "subdivision of courtyard"
7.	/ka/	- "put"	:	/kinka/	- "keep putting, nest (bird)"
8.	/lɔ/	- "why?"	:	/lunlɔ/	- "why on earth?"
9.	/tɔ/	- "twist"	:	/untɔ/	- "try"
10.	/wusiga/	- "turn"	:	/wunwusiga/	- "twist & turn"
11.	/zuma/	- "wait"	:	/zinzuma/	- "limp"

6.3.1.3.3 - Nominalized Stem: The Stem of Type III.iii is built on a transformational pattern, and is intrinsically a class-changing derivation. It has a Verbal Clause Predicate as its base while the Stem itself is a Nominal (Noun or Adjective) Stem.

Elements: A Root , a Suffix .

S.F.s : A Rankshifted V.Cl.Predicate (4.4.2, p.142) functions as Root. It is marked by the Suffix (-L), which has variants /-l/, /-li/, /-le/ and /-n/., lexically determined, attached to the VW of the Predicate VP, which may not ave the Non-Past Suffix (6.4.1) in addition. The Root may be:

a) An intransitive Predicate with simple VP;

b) An intransitive Predicate with Verb-Relational VP;

c) A transitive Predicate with simple VP;

d) A transitive pPredicate with Verb-Relational VP:

- these four types of Root yield slight variations: we give the formula and examples of each sub-Type below:

a) F.6a St.III.iii - Nom.St. = $+[\text{PRED}^{\text{VP(PD)}}]$ + -L (SX)

1. /kɔ-le/ - " exhaustion" (BH008)

cf. / a kɔ / - "he was tired" (BH005)

2. / gusi-le / - "old" (AT006)

cf. / awɔ gusi / - "he is old" (AU024)

b) F.6.b Nom.St.b = +[VP(PD)$^{VW(H)}$](Rt.1)+ -L (SX)+ [Rr] (Rt.2)

3. / laatu-l-la / - "distant" (AX064)

cf. / a laatu la / - "it is far away"

c) F.6.c Nom.St.c = + [+NP(O) + VP(PD)$^{VW(H)}$] (Rt) + -L (SX)

4. / fɔ-bi-le / - "food" (AJ006)

cf. / i ... fɔ bi / - "you...eat something" (AL016)

5. / fɔ-dɔ-le / - "knowledge" (BH003)

cf. / a fɔ dɔ / - "he knew something"

6. / dan-wu-l / - "farmer" (written conv.)

cf. / a dan wu / - he works a farm" (cf. AA002)

d) F.6.d Nom.St.d =

+ [+ NP(O) + VP(PD)$^{VW(H)}$](Rt.1) + -L(SX) + [Rr](Rt.2)

7. / fɔdɔle-ka-n-ma / - "the search for knowledge" (BH003)

cf. e.g. 5 above: / a a ka ma / - "he searched for it"

6.3.1.3.4 - The Numeral Stem: The Stem-Type III.iv comprises a special set of structures used for the Stems of Words of the Numeral Class (6.2.1.4 A - p.208).

There are three sub-Types:

III.iv.1 - Numeral Word-Stem Type 1 is the Stem for low Numerals , and consists of an obligatory Denominative Element, with one of the three unit sub-Classes of Numeral Morpheme (A, B, C - see 7.3.1.3.3, p.239) as exponent. This is optionally preceded by a Numeral Morpheme of sub-Class D (/bwele/ / /bole-/ functioning as Teen :

F.7 $\text{NumW.St.1} = \pm \text{NuMp}^{D}(\text{TEEN}) + \text{NuMp}^{\{A,B,C\}}(\text{DENOM})$

III.iv.2 - Numeral Word-Stem Type 2 is the Stem for Tens: 10, and 20 - 99. It consists of a Numeral Morpheme E obligatorily functioning as Ten, optionally followed by a Numeral Mp. of Class C or F functioning as Numerator (NUMR). This in its turn is optionally followed by a Denominator Element as in Type 1 above, marked by a preceding Particle (AN 2).

F.8 $\text{NumW.St.2} =$

$$+ \text{NuMp}^{E}(\text{TEN}) \pm \text{NuMp}^{\{C,F\}}(\text{NUMR}) \pm {}^{\text{AN 2}}\text{NuMp}^{\{A,B,C\}}(\text{DENOM})$$

III.iv.3 - Numeral Word-Stem Type 3 is the Stem for hundreds. An obligatory Hundreds Element (HND) with Numeral Morpheme G (/zolo/) as its exponent may be optionally followed by tens and units added by a strucure which resembles that of a coordinate NP with conjunctions (p.153):

- The Hundreds Element is followed by a unit - Numeral Morpheme A,B,C -

for 200 - 900. There then follows the Particle (KAN), and then the (Split: see 4.4.4, p.156) NP :

(A 1) - (YAA 2) - (KI 1) - NumW-St.1 (for 101 - 119, 201 - 219 etc.). For numbers 120 - 199 (etc.) the (KAN) is followed by (A 1) and the Ten-+-Numerator part of a Type 2 Stem followed by (KI 1), and then optionally by ⟨ a yaa ki ⟩ and the Denominator of Type 2.

F.9.a NumW.St.3.1 =

$$+ \text{NuM}^{G}(\text{HND}) + \text{NuM}_{p}^{\{A-C\}}(\text{H.NUMR}) \pm \langle \text{a yaa ki} \rangle - \underset{(\text{DENOM})}{\text{NumSt.1}}$$

F.9.b NumW.St.3.2 =

$$+ \text{NuM}_{p}^{G}(\text{HND}) \pm \text{NuM}_{p}^{\{A-C\}}(\text{H.NUMR}) \pm \text{NuM}^{E}(\text{NUMR})\langle \text{ki} \rangle \pm \langle \text{ a yaa ki } \rangle - \text{NuM}_{p}^{\{A-C\}}(\text{DENOM})$$

NOTE: There is also a 'Pseudo-Numeral' built along the lines of Formula 9.a above:

⟨wala kan a zi ki ⟩ - "millions" - (AX100)

Examples:

1. - Type 1:

a. ⟨diin⟩ - "one" : d. ⟨bwele-piiya⟩ - "twelve"

b. ⟨kaaku⟩ - "three" : e. ⟨bɔle-piiya⟩ - "twelve"

c. ⟨saapra⟩ - "seven" : f. ⟨bwele-si⟩ - "fourteen"

2. - Type 2:

a. ⟨ bu ⟩ - "ten" : d. ⟨bu-pre-an-neefu⟩ - "29"

b. ⟨bu-pra⟩ - "twenty": e. ⟨bu-si-an-soor⟩ - "45"

c. ⟨bu-kerku⟩ - "thirty": f. ⟨bu-sɔddi-an-piiya⟩ - "62"

3. - Type 3:

a. /zolo/ - "one hundred"

b. /zolo-si/ - "four hundred"

c. /zolo-kan-a-bole-diin-ki/ - "one hundred and eleven"

d. /zolo-siinya-kan-a-bu-pra-ki-a-yaa-ki-si/ - "824"

6.3.1.3.5 - The Suffixal Stem: The Stem of Type III.v is formed by the addition of the Suffix /-ta/ to a Verb Base[1], the resulting Stem being a Verb Stem taking Verb Non-Past Suffix in the normal way (6.4.1). The sense yielded is a derivative of the Root meaning in various ways depending on the Root:

F.10 St.III.v = + $M_p^{Sxl.V.Bb}$ (RT) + /-ta/ (SX)

Examples:

1. /bo/ - - "put out" : /boo-ta/ - "extract"

2. /gaa/ - "lead" : /gaa-ta/ - "crawl"

3. /zuu/ - "hang up" : /zuu-ta/ - "put upside-down"

6.3.2 - The Word-Suffix:

To Stems as described in the foregoing section may be added a Suffix from the Morpheme-Class of Suffix-Bases.

There are two Suffixes of inflectional type which may be added to nearly all members of the relevant large open Word-Class, syntactically mainitaining the Class but with Systemic exponential function.

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1 Suffixal-Stem Verb Base: see 7.3.1.3.4, p. 240.

The remaining six Suffixes are of a derivational type, with lexically-restricted application and in some cases changing the syntactic Class.

6.3.2.1 - Inflectional Suffixes:

A - Verbal Non-Past Suffix: (-LE 1) / (-N 1): cf. 6.4.1

B - Nominal Plural Suffix (-RO) : cf. 6.4.2

6.3.2.2 - Derivational Suffixes:

A : (-BAA 3) - with NW, AdjW, AjncW Simple St. yields abstract NW.

B : (-DA 3) - with Simple or Complex-Doubled Colour Adjective Stems, yield Colour AdjW.

C : (-DA 6), (-SA 2) - with Compound (or, in the case of (-DA 6), Simple) Noun Stem yields aggranditive/ diminutive Noun.

D : (-DUU 4) - with Simple Demonstrative Word Stem yields DemW.

E : (-RE) - with Simple NW or AjncW or Compound NW Stem yields diminutive Noun Word.

Examples:

1.A - /sa-le/ - "will take" ; /gaata-le/ - "will crawl"

1.B - /zi-ro/ - "fathers" ; /fobile-ro/ - "foods"

2.A - /kiri-baa/ - "chieftainship"; /guta-baa/ - "greatness"

2.B - /pii-da/ - "red" ; /nyinonyino-da/ - "shiny"

2.C - /zi-da/ - "grandfather"; /wonpiin-{sa, da}/ - "little finger", "thumb"

2.D - /naa-duu/ - "this-here"; /bi-duu/ - "that-there"

2.E - /kasi-re/ - "little basket"; /miisi-re/ - "slightest trouble"

6.4 - Word-Rank Systems:

The two major Systems at Word Rank are those which contrast the exponents of the contrasting terms of the Clause Rank Tense System (4.5.5, p. 163) and the Phrase Rank NP Number System (5.6.1, p.198). The former has the Verb-Word as its domain, and the latter all the Word-Classes which function in the NP except the QuantW. The Pronoun Word has its own System of Person - with high-Rank and extra-linguistic functions - which cross-classifies with the Nominal Plural System here.

6.4.1 - The Verb Word: Tense System

The exponents of the Clause-Rank Tense System (p.163) include, besides Temporal Elements, the choice of Past or Non-Past VP as Predicator (5.6.2,p. 200) and this choice is marked by the selection of Past or Non-Past Verb Word as Head. The Past-Tense Verb Word has a Verb Stem with no Suffix: the Non-Past VW has a Verb Stem with the Suffix (-LE 1) / (-N 1)[1]. Most Verb Stems accept this Suffix. There is only one case of a suppletive type of relationship - the Verbal Stem (BOR) - "come - is not used when the Non-Past Tense is required, but is replaced by the synonymous (ZE 3) which rarely appears without the Non-Past Suffix[2].

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[1] There are a few cases of the South-West dialect (-MA 9) (cf. p.18: Appendix D) Non-Past Suffix in the Corpus.

[2] Common Verbs (BA 2), (DAMA), (LEDA), (NOKO), (TA 2) + (W) are not found with the Non-Past Suffix

Examples:

1. /a n ta-n ... raa? / - "will she go...?" AL015
   she + go-will ...eh?

2. /Bonser bi ta-le'y / - "Billy-goat shan't go"
   billygoat not go-will AU007

3. /A n ta. / - "He went" AV053

4. /Ni'n ze-le / - "They will come" AG005
   they'+ come-will

5. /A n yi ze-n / - "It is coming" AE001
   it + is come-ing

6. /Ni'n bor . / - "They came." AK013

7. /Moo n tuu-ma Karatees'o . / - see p.227,fn.1-AA001
   I + leave-will Karateesi'from
   " I come from Karateesi."

6.4.2 - The Nominal Word: Number System

The Plural term of the Phrase-Rank System of NP Number (p.198) has amongst its possible exponents the selection of a Plural Noun, Adjective, Adjunctive, Numeral, or Demonstrative Word in various functions. In most cases these Plural Nominal Words are marked by the Plural Suffix (-RO) (and variants, see 8.2.4.3, pp. 253 ff.: for the Suffix see 6.3.2.1 A above). Where the Plural is not marked by the Suffix it may be shown by a suppletive or irregular Singular-Plural correspondence: - see below, Matrix 2 (PnW) , Matrix 1 (others).

MATRIX 1 - Nominal Plurals

NUMBER / CLASS	SINGULAR	PLURAL
AjncW	/guta/ - "big"	/gutɔɔ/
DemW	/ bi / - "the"	/ bɔɔ' /[1]
	/naa/ - "this"	/nɔɔ(n) /
NumW	/diin/ - "one"	all other NumW[2]
NW	/gwaa/ - "person"	/gwɔɔ/
	/ da / - "mother"	/dɔɔ/
	/kuli-kuli/ - "ground-nut 'biscuit'"	/kulu-kulu/
(Hr)NW[3]	/-biiga/ - "child"	/-biisi/
	/Moga/ / /Mowa/ - "Mossi"	/ Moosi /
	/Kusaa/ - "Kusasi"	/Kusaasi/

Examples

1. / gwaa kaaku naa / - "these three men" AMO11
   man three this

cf.2. / gwɔɔ kaaku-nɔ nɔɔn / - "those three men" AMO11
   men three-s[2] those

and 3. / gwaa diin bi / - "the one man" (sing.) AWO33

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1 For R.T. punctuation convention see 1.5.3.2.3, p.74

2 /piiya/ - "two" & /kaaku/ - "three" also take Pl.Suffix.

3 Formed on Moré pattern: loans.

4. /ɣ wɔɔ zi-rɔ bɔɔ' / - "our fathers" AD002

cf. 5. /ɣ Seeku zi bi / - "Seeku's father" (sing.) AF001

6. /ɣ budu-biisi / - "relatives" BH017

(singular /budu-biiga/)

7. /ɣ taan-nɔ boo? / - "where are the bowls?" BE006

cf. 8. /ɣ taan bii? / - "where is the bowl?" (sing.) BE002

6.4.3 - Pronoun Word: Person/Number Systems

The Pronoun Word enters, as a Nominal, into the Number System (see 6.4.2 above). It also cross-classifies this with the three-Term Person System which is relevant to high-Rank and situational conversation-role systems. The Bisa Pronouns may be displayed in a Matrix according to these two categories. It may be noted that each has a short form - a single Vowel or Nasal, and one or more longer forms with a further syllable added:[1] MATRIX 2

NUMBER / PERSON	SINGULAR	PLURAL
1st.	(M), (MƆƆ)	(WƆƆ), (ƆƆ)
2nd.	(I), (IBII)	(A 2), (AWƆ 2), (ABAA 2)
3rd.	(A 1),(AWƆ 1) (ABAA 1),(ABƆ)	(N 6),(NBƆƆN), (BURƆ) (A 3), (AWƆ 3)

[1] Following the short form except in 1.pl.: 2 short forms in 3.pl.

CHAPTER 7 - THE MORPHEME

7.1 - Introduction: Theoretical Status

The Morpheme, as the lowest Rank - the unanalysable Unit - of the Syntactic Hierarchy, has rather a special place in theoretical discussions. In the model adopted here the Morphemic Rank yields a string-exhausting analysis of any piece of linguistic data. This means to say that every piece of speech which is not predictable by phonological or morphophonemic rules and is not itself syntactically analysable is a Morpheme. There is therefore a major functional classification at this Rank into:

1) Elemental Morphemes - these function as Elements of Words.

2) Featural Morphemes - these have their sole function as Syntagmatic Features in the Ranks above.[1]

To avoid the frequent use of this somewhat cumbersome terminology, the terms "Bases" and "Particles" may be used.

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[1] Double Function (1.4.3.3.3, p.37) is covered under Selection as a Non-Morphemic Feature: 8.1.2

It should be noted that Functions comparable to those of the Featural Morphemes are fulfilled by non-morphemic signals - linear order, suprasegmental sound-features selectional choices, and so on (1.4.3.3.2, p.35): these will be treated separately in Chapter 8.1 below. It is also possible for such non-morphemic features to have functions comparable to those of Bases, though this does not occur in Bisa. This distinction of form and function makes it possible to resolve the problems caused by the basically 'segment of speech' character of the traditional use of the term 'Morpheme' in situations where grammatical categories may be represented by a mixture of segment and non-segment forms. We are able to retain the segmental sense of 'Morpheme' while recognising the two distinct sorts of function that these Morphemes fulfil, and also that similar functions may be shared with non-morphemic features[1].

It may be said that strictly speaking a Syntagmatic description of the form presented here, proceeding from the higher Ranks downwards, has already given all the necessary information about the functions of the Morphemes (by definition, of course, they have no structure to discuss) in the accounts of the Ranks in which they function. It is, however, convenient to summarise the various Classes in a Chapter devoted to the Morpheme, in order to draw together the threads of the description and to act as a form of index, oriented particularly towards the Morpheme.

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[1] Lyons, (1968, p.180 ff.) makes the same distinction between segment and category, but chooses to name the latter 'Morpheme'.

7.2 - Featural Morphemes: The Particles

7.2.1 - High-Rank Particles:

The Particles functioning in the Ranks above that of Sentence have been listed on p. 119 above in the discussion of the Minor Sentence - 3.2.1. We may also add here the Morphemes which only occur in Greetings - see 3.2.3, pp. 122 ff.:

(NYASI) - "welcome" (NAN) and (BAA 4) - "thanks"

(KON) - "all right"

7.2.2 - Sentence-Rank Particles:

Several of the Particles which function at Sentence Rank also have other featural functions at lower Ranks:

(BA 4), (BO 3) - mark Precedent in Maj.Sent.I - 3.1.1.1

(BAA 1) - marks Thesis in Maj.Sent.III - 3.1.1.3

(BI 2) - marks end of Precedent/Final in Maj. Sent.I, also of NP Type III/IV- 5.3.3/4

(GE 1) - marks end of Question, Maj.Sent. - 3.1.4.1.2/3, also of Interrogative or Negative Clause - 4.5.1/3

(GEE) - Multiple Question - 3.1.4.1.2.2

(K) - Initial marker of: Pcdt./Fin.,Maj.Sent.I; Relative Sent.-Construct NP II - 5.3.2.1.2 d.
Clause-Cstr., Nominal Cl.V - 4.4.1.5
Sentential Complement, V.Cl. IV.ii - 4.4.2.4
Jussive Clause - 4.5.2

Sentence-Rank Particles ctd.)

(KOO 2) - Question-final, Maj.Sentence - 3.1.4.1.2.1

(N 5) - Various sequential-marking functions:
3.1.1.4.2.b, 3.1.2.1/2, 3.2.1

(RAA) - Question-final, Maj.Sentence - 3.1.4.1.2.1
also Negative-final, Clause - 4.5.3.6

(SEE) - Precondition marker, Maj.Sent.II - 3.1.1.2

(Y) - Question-final, Maj.Sentence - 3.1.4.1.2.1/3
also Interrogative-final, Clause - 4.5.1
and Negative-final, Clause - 4.5.3.6

7.2.3 - Clause-Rank Particles:

Besides (GE 1), (K), (RAA), and (Y) mentioned above, 7.2.2, there are a number of specifically Clause-Rank markers:

7.2.3.1 - Nominal Clause:

(BANI)/(BANA) - Nominal Clause IV - 4.4.1.4

(BI 6) - Nominal Clause V - 4.4.1.5

(N 2) - Copula, Nominal Clause I - 4.4.1.1

(YI 3) - Copula, Nominal Clause III - 4.4.1.3
Continuous Clause-Aspect - 4.5.6

7.2.3.2 - Clause Systems:

(BEE 1), (BI 5), (BRI 1), (N 4) - Negative markers - 4.5.3

(BA 3) - Negative/Focus marker -

(A 5) - Pro-Verb, Predicate-Focus - 4.5.4.3

(-LE 1)/(-N 1) - Non-Past Tense (Cl./Phrase/Verb) - 4.5.5
5.6.2
6.4.1

(TRI)/(TI), (BRI 2) - Secondary Aspect - 4.5.6

7.2.4 - Lower-Rank Particles and Relators:

7.2.4.1 - Nominal Phrase Particles:

(BO 4) in NP. III - 5.4.3
also (BI 2), (K) - see 7.2.2

7.2.4.2 - Numeral Word Expression Particles:

(BAN 2), (KOO 3), (OO) - 5.5.1.1

7.2.4.3 - Word-Stem Particles:

(-L) in Nominalized Stem- 6.3.1.3.3

(-TA$_4$) in Suffixal Verb - 6.3.1.3.5

(-AN- 2) in Numeral - 6.3.1.3.4

7.2.4.4 - Relators: In a few instances Relators enter Word-Rank structures or into VP structure and are treated 5.4.1, 6.2.5, pp. 189, 214 . The overwhelming majority of tokens of this common Class of Morpheme are, however, in Featural function:

a) Marking Indirect Object, Locative, and Temporal in Verbal Clause:

4.4.2.1.2
4.4.2.2.2
4.4.2.3.2/3

b) Marking Comment in C.Cl.III-4.4.1.3

c) (MA 1) marks Obs., N.Cl.II-4.4.1.2

d) (KAN) ... (KI 1) marks Co-ord. NP Expression and Numeral Stem -

4.4.3.1
6.3.1.3.4

The Relators are: (KAN)...(KI 1),(LA 2), (LE 3), (MA 1), (N 3), (O),(PA 2),(TAA 2),(ZI 4

7.3 - Elemental Morphemes: Bases

Base Morphemes enter into the structure of Words in normal hierarchical manner. They are classified according to whether they enter into the Stem layer of the Word or into the Suffix (6.3, p.215). Those that enter into the Stem may be further classified according to the various sub-Types of Stem and their own functions therein.

7.3.1 - Stem Bases:

7.3.1.1 - Simple Stem Bases: These function only as Root of the Simple Stem, 6.3.1.1, p.215. This Class includes the majority of Bisa Morphemes. At further degrees of Delicacy it would be possible to sub-classify in accordance with the Word-Class to which the Stem belonged. As these are mostly large open Classes we give examples, rather than lists, here:

(BIDE)	-	"wizard"	(enters Noun-Stem)
(PI 2)	-	"speak"	(enters Verb-Stem)
(MINQA 1)	-	"good"	(enters Adjunctive-Stem)
(KANQIDA)	-	"hard"	(enters Adjective-Stem)
(NOON)	-	"these"	(enters Demonstrative-St.)
(KWAAY)	-	"all"	(enters Quantitative-St.)
(BOY)	-	"easily"	(enters Adverb-Stem)
(PAA 3)	-	"very"	(enters Intensifier-St.)

7.3.1.2 - Compound-Stem Bases Bases entering into Compound Stems (6.3.1.2) may be further sub-classified according to their function in the two Elements of the Stem, and whether they also function in other Stem-Types:

7.3.1.2.1 - A: Initial or Second in Compound, also Simple:

(MIN 1) - "head" - /do-min/ - "morning"
/mii-yaa/ - "skull"
/min/ - "head"

also: (LE 2) - "mouth", (LU) - "woman"

7.3.1.2.2 - B: Initial and Second in Cpd., also in Simple or Reduplicated:

(DA 1) - "mother" - /daa-da/ - "grand-mother"
/zii-da/ - "husband's mother"
/din-da/ - "mother-in-law"
/ da / - "mother"

also: (FO 1) - "thing"

7.3.1.2.3 - C: Initial in Cpd., also Simple or Red.:

(GEER) - "courtyard" /geel-le/ - "entrance"
/gin-geer/ - "sub-yard"
/ geer / - "courtyard"

7.3.1.2.4 - D: Initial in Compound, also Simple:

(MIN 3) - "word, palaver"
/mii-si/ - "any trouble"
/ min / - "palaver"

also: (BIR 1) - "goat", (DIR 1) - "cow", (GAN) - "foot, leg", (KAR 1/2) - "dawa-dawa/anus", (KOR 1/2) - "hen/shea", (MIN 5) - "mate", (PAR) - "house", (SIR) - "sheep", (WO 1) - "hand, arm", (YIR 3) - "ground-pea"

7.3.1.2.5 - E: Second in Compound, also Simple:

(LEE 1) - "leaf" /fo-<u>lee</u>/ - "spinach"
/ <u>lee</u> / - "leaf"

<u>also</u>: (BUR) - "grass", (GIR 1) - "egg",
(NYI 1) - "child", (NYIISI) - "flour",
(SI 5) - "any", (YAA 1/2) - "seed/bone"

7.3.1.2.6 - F: Initial in Compound only:

(KANBɔ-) - "crooked" /<u>kanbɔ</u>-laari/ -
"a crooked wife"

<u>also</u>: (PISA-) - "pisa plant)
(YIR 2) - "circle"

7.3.1.2.7 - G: Second in Compound only:

(-PIIN) - "digit" /wɔ<u>n</u>-<u>piin</u>/ - "finger"

<u>also</u>: (-BAN 1) - "crone", (-FEER 2) -
"whistle", (-GIR 2) - "round",
(-KEERI) - "sherd", (-LUR) -
"heifer", (-MA 8) - "place",
(-NYEEN) - "little", (-SILA) -
"field", (-ZEEN) - "small".

7.3.1.3 - <u>Complex-Stem Bases</u>: Apart from Compound Stem Bases of Classes B and C above, there are a number of Bases which function in the Complex Stem:

7.3.1.3.1 - Doubled Stem: A - Doubled or Simple Stem:

(GƝLI) - "pretty", (DIITAA)/DIINAA)
- "now", (POORI) - "little", (ZI 6)-"side"

B - Doubled only:

(KUR) in /kur-kur/ - "pig"
(KULI) in /kuli-kuli/ - "g.-nut biscuit"
(KɔTA) in /kɔta-kɔta/ - "rubbish"

7.3.1.3.2 - Reduplicated Stem **Bases**: These function in the Reduplicated Stem and may or may not also be found in Simple Stems:

A: Reduplicated and Simple Stems:

(BA 1) - "do", (BƆ 2) - "take out", (BUSU 2) - "hurt", (DA 4) - "drop", (DƆ 3) - "look after", (DU 2) - "drop", (GA 3) - "die", (GIN 2) - "stand", (GU 2) - "open", (KA 3) - "give", (KA 5) - "search", (LƆ 4) - "why?" (PA 3) - "shoot", (PE 2) - "blow", (SƆ 3) - "hate", (TA 1) - "go", (TƆ 4) - "bend", (WUSIGA) - "turn", (ZE 1) - hit, kill", (ZU 1) - "lose", (ZUMA) - "wait".

B: Reduplicated Stem only:

(-KA II) - "itch", (-KASÀ) - "rib", (-KƆ 3) - "scratch", (-SA 5) - "sew", (-YU) - "try".

7.3.1.3.3 - Numeral Stem Bases: These function in the Complex Stem Type III.iv - Numeral Stem (p.222 ff.) and are sub-classified in accordance with their various function-options in those structures:

Numeral Morpheme A:	(DIIN)	-	"one"
Numeral Morpheme B:	(PIIYA)	-	"two"
	(KAAKU)[1]	-	"three"
Numeral Morpheme C:	(SI 1)	-	"four"
	(SOOR)	-	"five"
	(SƆDDI)	-	"six"
	(SAAPRA)	-	"seven"
	(SIINYA)	-	"eight"
	(NEEFU)	-	"nine"
Numeral Morpheme D:	(BWELE-) / (BƆLE-)	-	"-teen"

[1] Also quasi-reduplicated: see p.220.

Numeral Morpheme E: (BU 1) - "ten"

Numeral Morpheme F: (PRA) - "twen-"
(KERKU) - "thir-"

Numeral Morpheme G: (ZƆLƆ)[1] - "hundred"

7.3.1.3.4 - Suffixal Verb Bases: These function as Root of Complex Verb-Stems of the Suffixal Type (6.3.1.3.5, p.225). Most also function as Simple Stems of the Verb sub-Class:

A: Suffixal or Simple Stem:

(BƆ 2)[2]- "go out" gives /boota/ - "extract"
(GƆ 2)[2]- "open" gives /goota/ - "stay"
(KIN) - "pass" gives /kinta/ - "found"
(NYƆƆ) - "sned" gives /nyoota/ - "push"
(WU 1) - "do" gives /wu-ta/ - "lie/lay"
(GAA 1) - "lead" gives /gaata/ - "crawl"

B: Suffixal Stem only:

(BII-2) in /biita/ - "bury"
(KUN-) in /kunta/ - "bend over"
(NYIN- 2) in /nyin-ta/ - "sit"
(SUN- 4) in /sun-ta/ - "squat"

7.3.2 - Suffix Bases:

The Bisa Suffix Bases are distinguished as Derivational or Inflectional (see 6.3.2, p.225 f.). With the former it is necessary to list the limited set of Stems to which they may be added.

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1 Also in Doubled Stem - 6.3.1.3.1, p. 218 f.

2 Morphophonemic variant see p.251.

7.3.2.1 - Inflectional Suffixes:

7.3.2.1.1 - Nominal Plural Suffix: The Nominal Plural Suffix is referred to in Morphemic Transcription as "the Morpheme (-RƆ)". The morphophonemic situation in the attachment of this to particular Stems is, however, a complicated mixture of phonological and morphological conditioning between 'allomorphs' /-lɔ/, /-nɔ/ and /-rɔ/ with variants of the Stems as well (8.2.3.3 and 8.2.4.3 below), while some Stems have other marks of plurality (6.4.2/3, pp.228 ff.).

7.3.2.1.2 - Verbal Non-Past Suffix: The marker of Non-Past Tense (see p.234) is attached to Verb Word Word Stems, with forms (-LE 1) and (-N 1) (dialect variant (-MA 9) : see p.227, fn.1). In most contexts these are interchangeable, but there are some factors which control the choice in certain cases:

a) Only (-LE 1) occurs when immediately followed by (Y) .

b) Normally (-N 1) occurs with Continuous Aspect (4.5.6, p.163): 47 out of the 206 intances, as contrasted with 11 out of 128 for (-LE 1).

c) Normally (-N 1) occurs when followed immediately by (GE 1), (KOO 3), (RAA) - 12/206 ct. 3/128 for (-LE 1) .

d) Some fairly common Verb Stems form the Non-Past with one form of the Suffix: -

with (-LE 1): (NWA 2), (YA), (YAR 3).
with (-N 1): (BIR 2), (DIR 2), (KIN), (LA 3/4), (NYA), (SI 4).

7.3.2.2 - Derivational Suffixes: In most cases the suffixes are added to Stems which may also function without Suffix (those that are not so found are hyphenated in M.T.). If the suffixed form functions in a different Word-Class the Suffix is "Class-changing". Details and examples are found on p.226 .

A: (-BAA 3) - abstract Noun formative; with: (GIN 3) - "enemy", (GAASIBA) - "friend", (GINTA) - "long", (GUTA) - "big", (KAARE) - "clever", (KIR) - "chief", (NYINTA 2) - "sweet", (SARA) - "play", (ZI 2) - "work".

B: (-DA 3) - Colour Adjective Suffix; with: (BULA 1) - "blue, green",(BUNBWEE-) - "scarlet", (FU) - "white", (KUN-) - "black", (KINƆƆ) - "pink", (NYINƆ-NYINƆ-) - "shiny", (PƐKU-) - "mauve", (PII) - "brown", (SI 8) - "red-brown".

C: (-DA 6) - Aggranditive Suffix; with: (WƆ 1 - PIIN) - "finger", (GAN-PIIN) - "toe".

D: (-DUU 4) - Demonstrative Suffix; with (BI 1) - "the" (NAA 1) - "this"

E: (-RE) - Diminutive Suffix; with: (BƆNSER)[1] - "billy-goat", (KASI) - "basket", (GUTA)[1] - "big", (MII 3- SI 5) - "any trouble"

F: (-SA 2) - Diminutive Suffix; with: (WƆ 1- PIIN) - "finger", (GAN-PIIN) - "toe"

[1] Stem allomorph see 8.2.3.1, p.250 ; /gita-re/ - "an elder"

CHAPTER 8

NON-MORPHEMIC FEATURES AND MORPHOPHONEMICS

8.1 - Non-Morphemic Features:

In the approach followed in this presentation, we separate segmental Morphemes, whether Featural or Elemental in function, from syntactically-significant non-segmental features (1.4.3.3, pp. 33 ff.; 7.1, pp. 231 ff.). In the first part of the present Chapter we consider the latter as they occur in the Syntax of Bisa. As in the case of the Morpheme Rank (p.232) above, this discussion contributes to the description in a largely cross-referential way, drawing together the scattered mentions of these features in the various Rank descriptions.

8.1.1 - Intonation:

There is very little use of suprasegmental phonological features in the Syntax of Bisa. The only case outside the Exclamations (3.2.2, pp. 121 ff.) is the possibility of using the Question Intonation (Type II, 1.5.3, p.68) alone to mark the Question term of the Sentence-Rank System of Modality (3.1.4.1.2, p.115), especially when used as a Query:

Example:

1. // IS: ... a n boo-ro kinta zaa bo'o.../
he + blindman-s put path the'on

// YA: Boo-ro ? /
blindman-s (Quest. Inton.)

// IS: Eee ! Gwoo ku'n mii-yaa bi lee yi-le'w'i./
(excl.) men that'their eye-hole not AV019/20
place see-will'at'(neg.)

IS: "... and he put blind men by the entrance..."

YA: " Blind men?"

IS: " Yeah ! People whose eyes can't see anything."

8.1.2 - Selection:

There are a number of cases where selection of a Unit of a particular sub-Class (in place of possible susbstitutes) in a function in a mediate constituent of a Unit constitutes a feature of that Unit with syntactic significance: these are cases of double function (Selection: p.36; double function p.38).

8.1.2.1 - Sentence Rank: The selective features of relevance at Sentence Rank are:

A: (BOKA-LE 1) Head of VP(PD) marks Clause as Bokale-Clause, SF of Maj.Sent.IV - 3.1.1.4.

B: Selection of Auxiliary Verb Word as Head of VP marks Clause as Initial in Aux. Clause-Sequence - 3.1.2.2/3

C: Selection of Motion Verb Words and Auxiliaries marking Motion Term of Sentence-Rank Motive System - 3.1.4.2.1

8.1.2.2 - Clause Rank: The other Rank at which selection has important featural function is the Clause:

A: The selection of Verb Word sub-Classes marks the distinctive structure and construction of the Verbal Clause Types - 4.4 cf. 6.2.4.

B: The selection of Interrogative Nouns (NW Classes C.a, D.a, G.a - 6.2.1.2) and Adjunctives (AjncW B - 6.2.2) marks the Interrogative term of the Clause Rank System of Information - 4.5.1.

D: The selection of Words as Head of NP(TEMP) marks the terms in the Clause-Rank System of Tense - 4.5.5.

8.1.3 - Linear Order:

Linear order is of paramount importance as a structural principle throughout the Syntax of Bisa. All the Formulæ are linearly ordered with the exception of a few cases where there are optional variations of order:

variants of order ctd.)

A: Chapter 3, F.2 - order of Precondition and Effect.

B: Chapter 4, F.4 - order of Topic and Comment

C: Chapter 4, F.16 - position of Adverbial Phrase.

There are also cases where deviations from unmarked order need to be recognised:

D: Split Nominal Phrase - 4.4.4

E: Front-shifting of Clause-Elements to mark item in Focus in the Focal System - 4.5.4 .

While order of Elements is of general significance in the Formulæ , there are certain cases where it is especially important in distinguishing the functions of a Class of lower-Rank Unit with several potential functions in the structure concerned:

F: order (before or after Base) distinguishes Precedent and Final Clauses with (K) in Maj.Sent.I - 6.1.1.1

G: order distinguishes NP functions in the V.Cl.: Subject from Object (before the Predicator, and in that order), and also these from (post-PD.) IO, Locative and Temporal - and these from each other - when no Relator is present - Ch.4, F.16 cf. pp.204 ff.

H: Class C of Numeral Morpheme functioning as Numerator or Denominator in Numeral Word-Stem Type 2 - Ch.6, F.7

8.1.4 - Omission:

The structurally- or systemically-significant omission of part of a structure generated by an unmarked Formula is postulated for Bisa in the case of:

A: Reduced Question Sentence - 3.1.4.1.2.3

B: Motion Sentence - 3.1.4.2.1

C: Minor-Sentence Fragmentation - 3.2.4

D: Sentence-Construct as Complement of V.Cl. Type IV.iv - 4.4.2.4

E: Imperative Focal Jussive - 4.5.2

8.2 - Morphophonemics:

The 'output' of the description so far is a set of strings of Morphemes, with indications of non-Morphemic features of intonation, selection, order, and omission, characterised as grammatical for Bisa as represented by the Corpus as sample. As Syntactic entities the Morphemes could be represented by any unitary symbols without affecting the syntactic description.

Each Morpheme has associated with it one or more phonological forms - its 'allomorphs' - by the Morphophonemic realization rules (mapping, correspondences) of 'Spelling' (p.21, fn.3). These are a distinct inter-Level component of the Grammar, detailing the relationship between the Morpheme as an indivisible syntactic Unit and the Spelling as a form which may be segmentable into component phonological Units (cf. Hockett, 1961). We may distinguish a number of different sectors of this Morphophonemic component according to the nature of the information needed to specify the realisations:

1) Spelling: The basic Spelling realization is a relationship between a Morpheme and an abstract phonological string: in fact the convention of our Morphemic Transcription (1.5.2, p.70) telescopes this relation with the theoretically-distinct stage of assigning a unique symbol to each unitary Morpheme (at the bottom' of the Syntax). This is done for the convenience of the reader, who is given thereby some way of 'pronouncing' the Morpheme-names.

2) Fluctuation: The stage which follows Spelling states the cases where there are freely-fluctuant allomorphs such that one may be used in any context where the other occurs without any change of meaning or Syntax. This is sometimes called Variation, but this sometimes leads to lack of clarity because the latter term is also used for conditioned alternations.

3) Morphemically-Conditioned Allomorphy: At the next stage variants are stated which necessitate specification both of the Morpheme which varies and of its syntactic or morphemic environment.

4) Phonologically-Conditioned Allomorphy: At this stage variants are stated which necessitate the specification of the Morpheme which varies and its phonological environment (when the neighbouring Morphemes are 'spelled').

5) Phonological Adjustment: The final Morphophonemic stage is that which states where certain sequences of Phonological Units resulting from the Syntax and higher

Morphophonemics may or must be changed[1] to other phonological sequences. At this stage any other adjustments necessary are also carried out so that the final output will be purely phonological material and wholly consonant with the phonological structures of the language.

The lower of these stages tend to be those which yield the most-general statements, and it is therefore desirable to account for as much as possible of the morphological variation at these levels. In natural language it may be found that the variants of certain Morphemes are partially covered by one stage and partially by one or more of the others - in Bisa this is particularly the case with the Nominal Plural Suffix (6.3.2, 6.4.2); we have therefore introduced a 'Mixed Conditioning' stage into the description (8.2.4 below) between the third and fourth of the logically-distinct stages outlined above.

8.2.1 - Spelling:

Each Morpheme is spelled as an abstract phonological sequence (symbolised by capital letters), with a numeral index to distinguish homophones, and a hyphen to indicate 'bound' status. The output of this stage, placed in parentheses, has been used for the Morphemic Transcription (1.5.2, p.70) throughout the body of this description.

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1 The process terminology is often more appropriate than others for Morphophonemics (cf. Hockett; 1954, 1961).

8.2.2 - Fluctuation:

There are a few cases of freely-fluctuating allomorphs in Bisa:

(BIL 1/2)	fluctuates with	(BIR 1/2)	- "goat/call"
(BOKA-)	fluctuates with	(BAKA-)	- SF: 3.1.1.4
(DA 1)	fluctuates with	(NA 1)	- "mother"
(DIITAA)	fluctuates with	(DIINAA)	- "now"
(FIN)	fluctuates with	(FILLE)	- "date"
(KALA)	fluctuates with	(KALA)	- NW G.a:6.2.1.2
(KALEN)	fluctuates with	(KARAN)	- "completion"
(PAA 3)	fluctuates with	(BAA 4)	- "very"
(POOLI)	fluctuates with	(POORI)	- "little"
(RAA)	fluctuates with	(LAA)	- SF: 7.2.2
(YA)	fluctuates with	(YAR 3)	- VW C.a: 6.2.4
(ZALGA)	fluctuates with	(ZARGA)	- "thatch"
(ZENQANI)	fluctuates with	(ZANQANI) and (ZARGE)	- "tin"

-for the variant forms of Pronouns see 6.4.3, p.230 .

-there are also a few variants involving Baraka or South-West Dialect forms:

(-MA 9)	- S.W.	for	Lb.	(LE 1)	- Non-Past Sx.
(HAM)	- Bk.	for	Lb.	(NAA 1)	- "this"
(TI)	- Bk.	for	Lb.	(TRI)	- SF: 4.5.6

8.2.3 - Morphemic Conditioning:

8.2.3.1 - (BONSER) - "billygoat" becomes (BONSA) before (-RE) - diminutive Sx. - 6.3.2

(GUTA) -"big" becomes (GITA) before (-RE)

(-PRA) - "twen-" becomes (-PRE-) before (-AN 2-) - Numeral Morpheme F:7.3.1.3.3, cf. 6.3.1.3.4

8.2.3.2 - (BƆ 2) and (GƆ 2) have the (Ɔ) lengthened before Suffix (-TA 4) in Stem Type III.v, p.225

8.2.3.3 - Various Bases have allomorphs which occur when initial in a Stem of the Compound Type - see 6.3.1.2, p.217 - SFs c. - g. .

8.2.3.4 - Various Bases have allomorphs which occur when Stem-final followed by Suffix (-RƆ) :-

(GER 1/2)	-	"pot/corpse"	becomes (GIL-)
(KANPAALA)	-	"maize"	becomes (KANPAAL-)
(LƆRI)	-	"lorry,car"	becomes (LƆL-)
(NEEN)	-	"tongue"	becomes (NEEL-)
(NYINBUR)	-	"spinach"	becomes (NYINBWEL-)
(PAR)	-	"house"	becomes (PAL-)

- all these then take (-LƆ) by rule 8.2.4.3.1, c.: p.254

(BALA)	-	"stick"	becomes (BAN-)
(BAYTIR)	-	"deaf-mute"	becomes (BAYTIN-)
(DƆLƆ)	-	"mother's brother"	becomes (DƆN-)
(-L)	-	(Sx. Stem III.iii)	becomes (-N-)
(LAAR)	-	"wife"	becomes (LAN-)
(-BWEERE)	-	"teenager"	becomes (-BƆN-)
(SI 5)	-	"any"	becomes (SUN-) or (SIN-)
(SURE)	-	"orphan"	becomes (SUN-)

- all these then take (-NƆ) by rule 8.2.4.3.1, d.: p.254

(KIR) - "chief" may become (KIL-) or (KIN-) or follow rule 8.2.4.3.1, a.: p. 253

8.2.3.4 - An anaptyctic sound is added between certain Morphemes in Compound-Stem construction (cf.8.2.4.1)

(-A-) in (KAR 1) + (NYIISI) - and others see 6.3.1.2:SF,h

(-N-) in (WƆ 1) + (-PIIN) - and others, loc.cit.: SF, i

8.2.3.5 - Where a third person singular Pronoun is Head of a Relational NP (IO, Locative, or Temporal) marked with a Relator, the Pronoun has zero realization (or 'is omitted'), see p.45 .

8.2.4 - Mixed Conditioning:

There is mixed conditioning in a number of types of case. This involves, for instance, specification of an item by sound and Syntax (e.g. "a Pronoun ending with a Vowel" in 8.2.4.1 below).

8.2.4.1 - Anaptyxis (cf. 8.2.3.4) occurs:

A: (-Y-) between a Pronoun ending with a Vowel and (A 4) a Pronoun beginning with a Vowel:

Examples:

1. (A 1) - (A 1) - (SUU 2) - (WƆƆ) - (O) - AXO37

becomes (A 1 - Y - A 1 - SUU 2 - WƆƆ - O)

= / ayasuuwɔɔw/ - "he rules over us"

2. (K) - (A 3) - (A 4) - (A 1) - (BIITA 4) - ANO24

becomes (K - A 3 - Y - A 4 - A 1 - BII-TA 4)

= / kayaabiita / - "to go and bury her"

B: (-YI-) between a Pronoun ending in a Vowel, and a following Pronoun (NBƆƆN) - "they"

Example:

3. (MƆƆ) - (NBƆƆN) - (BUSU 1) becomes (MƆƆ-YI-NBƆƆN-BUSU 1)

= / mɔɔyimbɔɔmbusu / - "I carried them" (elic.)

8.2.4.2 - Where two Morphemes are linked into a Compound Word-Stem, except as specified in 8.2.3.4 above:

A: final (-R) becomes (-L-) before initial (L-)

Example:

4. (PAR) - "house" + (LE 2) - "mouth" becomes (PAL-LE 1)
= /palle/ - "main entrance"

B: final (-R) becomes (-N-) before initial (NY-) or (Z-)

Examples:

5. (BIR 1) - "goat" + (NYI 1) - "child" becomes (BIN-NYI 1)
= /biɲɲi/ - "kid"

6. (KOR 1) - "hen" + (-ZEEN) - "little" becomes (KON-ZEEN)
= /konzeem/ - "chick"

8.2.4.3 - The Nominal Plural Suffix (-RƆ) has allomorphs (-LƆ), (-NƆ) and (-RƆ) with partially phonological conditioning:

8.2.4.3.1 - Basic Phonological Conditionings:

a) With Stems ending in a short Vowel followed by (-R), the Vowel is lengthened and Suffix-allomorph (-RƆ) used. With these Stems the final Vowel of the Suffix may become (-ɔ) :

Examples:

7. (BIR 1) - "goat" + (-RƆ) = (BIIR-RƆ) - /biiru/ - "goats"

8. (TOR) - "ear" + (-RƆ) = (TOOR-RƆ) - /tooro/ - "ears"

9. (YAR 1) - "male-man" + (-RƆ) = (YAAR-RƆ) - /yaaro/ - "men"

Exceptions:

A: Stem-change (see 8.3.3.3): (BAYTIR), (GER 1/2), (KIR)

B: Add (-LƆ): (GIR 1) - "egg" (KAR 1/2) - "dawa-dawa tree/anus"
(KER) - "penis" (KUNBIR) - "back"
(KURKUR) - "pig" (MƆR 2) - "load"
(PAR) - "house" (YIBƆR) - "elephant"

b) With Stems ending in a long Vowel followed by (-R), the Suffix-allomorph is (-LƆ) :

Examples:

10. (GEER) - "courtyard" + (-LƆ) = (GEER-LƆ) - /geellɔ/ - "yards"

11. (WUTAAR) - "sleeping-mat" + (-LƆ) = (WUTAAR-LƆ)
- /wutaallɔ/ - "sleeping-mats"

Exception: Stem-change (8.3.3.3): (LAAR)

c) With Stems ending in (-L) or (-Y) the Suffix-allomorph is (-LƆ) :

Examples:

12. (PIPEL) - "wind" + (-LƆ) = (PIPEL-LƆ) - /pipellɔ/ - "winds"

13. (MOY) - "rice" + (-LƆ) = (MOY-LƆ) - /moylɔ/ - "rice-types"

d) With Stems ending in (-N) or (-W) the Suffix-allomorph is (-NƆ) :

Examples:

14. (BEEN 1) - "bird" + (-NƆ) = (BEEN 1-NƆ) - /beennɔ/ - "birds"

15. (NOON) - "story" + (-NƆ) = (NOON-NƆ) - /noonnɔ/ - "stories"

16. (NYEW) - "cat" + (-NƆ) = (NYEW-NƆ) - /ɲewnɔ/ - "cats"

Exception: Stem-change (8.3.3.3): (NEEN)

8.2.3.2 - Morphological Conditionings of Pl.Sx.:

Besides the Stem-Allomorphs (8.3.3.3) there are a number of other Stems which take (-NƆ) and (-LƆ) without fulfilling the above phonological

conditions. In these cases the Suffix is added to the unchanged final Vowel of the Stem:

a) Suffix-allomorph (-LƆ) :-

(BUSA)	- "yam"	(KOOSI)	- "bean-flour cake"
(GABU)	- "onion-greens"	(LA 1)	- "rain"
(KANIYA)	- "lamp"	(LIPI)	- "spittle"
(KASI)	- "basket"	(PUNQA)	- "wall"
(KILA)	- "charcoal"		

b) Suffix-allomorph (-NƆ) :-

(BELEKƆ)	- "guinea-corn"	(KWAASA)	- "butcher"
(BISA 1)	- "Bisa"	(ME 1)	- "body"
(GA 1)	- "guinea-fowl"	(MUNTUU)	- "fly"
(GI 1)	- "dog"	(NYI 1)	- "child"
(GƆ 1)	- "tree, stick"	(PIIYA)	- "two"
(KAAKU)	- "three"		

8.2.3.3 - All other Nominal Stems have the Suffix-allomorph (-RƆ) added to the unchanged final Vowel of the Stem.

Examples: (ZI 1) - "father" becomes (ZI 1-RƆ) - /ziro/ "fathers"

(FƆ 1) - "thing" becomes (FƆ 1-RƆ - /foro/ - "things"

8.2.5 - Phonological Conditioning:

In a number of cases the realisation of a particular Morpheme is determined by the phonological environment irrespective of the syntactic relationships: [1]

[1] For Reading Transcription conventions in these areas see pp. 73 ff.

8.2.5.1 - a) (M) followed by a Nasal (incl.(M)) becomes (MI)
b) (M) followed by a Consonant becomes (N)
c) (M) followed by Vowel or Pause remains (M)

8.2.5.2 - a) (K) followed by a Nasal becomes (KU)
b) (K) followed by a Consonant becomes (KUN)
c) (K) followed by a Vowel remains (K)

8.2.5.3 - a) (W) followed by a Consonant or Nasal becomes (WU)
b) (W) followed by a Vowel remains (W)

8.2.5.4 - a) (O) preceded by /-a/ or /-aa/ may become (A)
b) (O) preceded by a Vowel otherwise becomes (W)
c) (O) preceded by a Consonant or Nasal remains (O)

8.2.5.5 - a) (Y) preceded by /-a/ or /-aa/ may become (A)
b) (Y) preceded by /-ɔ/ or /-ɔɔ/ may become (Ɔ)
c) (Y) preceded by Nasal or Consonant becomes (I)
d) (Y) otherwise remains (Y)

8.2.5.6 - Morphemes ending in /-_/ when followed by (O) may either drop the /-i/ or retain it, the rules 8.2.5.4 above applying thereafter:

Example: (DAASI) - "market" + (O) = /daaso/ or /daasiw/
- "to market"

8.2.5.7 - (BI 4), (BI 5), (BRI 1), (BRI 2), (TI)/(TRI), (YI 3) when followed by a Vowel lose their own final Vowel.

8.2.5.8 - (YI 3) preceded by Consonant or Nasal becomes (I)

8.2.6 - Phonological Adjustment:

The abstract phonological sequences resulting from the Syntax and higher Morphophonemics are convert to phonemic strings by:

a) deleting the numerals

b) converting (NY) to /ɲ/ and (NQ) to /ŋ/

c) converting (Y) to /j/

d) converting Nasal before a Consonant to a Nasal homorganic with that Consonant.

e) converting Morpheme-final (-N) followed by a Vowel to /-n-/

f) converting pre-pausal Nasal to /-m./

g) converting remaining upper-case letters to corresponding lower-case ones.

h) adding Intonation specified by Syntax (8.1.1,p.244).

i) enclosing the whole in slash-brackets

- Then the following optional or obligatory adjustments apply:-

8.2.6.1 - A Word ending with a Nasal preceding a Word beginning with a Nasal (including Morpheme (M)) has an anaptyctic /-i-/ inserted following the first, and the second may be deleted.

8.2.6.2 - A sequence /-mb-/ may be replaced by /-mm-/.

8.2.6.3 - A sequence of a Syllable ending in /-r/ followed by a Vowel-initial Syllable may be collapsed into a single Syllable with initial Cr- by the omission of the Vowel of the first Syllable:

F.1 $-C^1V^1r + V^2C^2- = /-C^1rV^2C^2-/$

Example: 1. /pir/ + /an/ = /piran/ or /pran/

8.2.6.4 - A sequence of an /-r/ followed by an / l-/ may be replaced by double /-ll-/

Example: 2. /zor/ + /le/ = /zorle/ or /zolle/

8.2.6.5 - A sequence of an /-r/ followed by a Consonant not adjusted above has an anaptyctic Vowel inserted. This Vowel is /-i-/, /-a-/ or /-u-/ according to whether the Vowel that precedes the /-r/ is front, central or back respectively.

Examples: 3. /dir/ + /n/ = /dirin /

4. /fer/ + /n/ = /ferin/

5. /kar/ + /y-/ = /karay-/

6. /mɔr/ + /b-/ = /mɔrub-/

7. /lor/ + /m-/ = /lorum-/

8. /bur/ + /s-/ = /burus-/

8.2.6.6 - An /-e/ followed by any Vowel may optionally be deleted:

Example: 9. /digale/ + /a/ = /digalea/ or /digala/

8.2.6.7 - A sequence of an /-i/ followed by an /a-/ may be optionally replaced by /-ee-/ :

Example: 10. /bi/ + /a/ = /bia/ or /bee/

8.2.6.8 - Any doubled Consonant may be shortened to a single short Consonant or may remain long:

Example:

11. /noon/ + /nɔ/ = /noonnɔ/ or /noonɔ/

8.2.6.9 - Any triple-mora Vowel - except Ideophones, see Appendix E - generated above is shortened to a normal long Vowel:

Example: 12. /naa/ + /a/ = /naa/

8.2.6.10 - If two adjacent Syllables are identical, they may be collapsed by the omission of one of them:

Example: 13.

/aɲi/ + /ɲintam/ = /aɲiɲintam/ or /aɲintam/

APPENDIX A

- SAMPLES OF TRANSCRIPTIONS :

1. Text AJ in Phonemic Transcription (see p.69):[1]

David Isa: Gwaayinyintakaaku. Nitan-natiŋadaaso. Gwoonoon kunnitambi pitazaala. See - ni - niblapiibmanimbakaleninatiŋakom. Gwaadiin pannisa. Ana - ana - hinaba - anadaarkopibimaantolaaŋkim. Diimbipeensa. Ampibiwupiiya. Antow. Ambopibibidiyaaw. Diinin - dorsa. Kanseki. Aŋgasupibinom. Antaanafobileba. Annoombizeantananbogambila. Gookaakunonoon - ŋkayaadama - am - ambilapibima apaŋaŋge?

Kaasim: Mhmm - weel - hina - boyagasupibinowam - amfobilekasaalaanabibi. Biyadamaanleda - kwaay.

D.I.: Bi - ibiiyidamaebiipeensaepibiwosiŋ - koo?

K. : Biyanyam?

D.I.: Bigwaakaapannisa? A - a - anadaarkopibilabi?

K.: Bi - bilaapannibipaŋam.

D.I.: Ay - pa - pannibisokibiiseedaarkopibila teŋkibiileeku. Itolabi - a - gasupibinom.

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[1] Punctuation conventions: Space = brief pause
. = end of Type I I.G. (p.68)
? = end of Type II I.G. (p.68)
! = end of Type III I.G. (p.69)
- = hesitation

K. : Ah ! Pannapaŋa pannikaŋidasiinabigasupibinɔsiim.

D.I.: Mm ! Pannipoorisɔ pannigutabeeni.

K. : Eniwee - aŋeesimbisɔ?

D.I.: Aŋeesibeembi?

K.: Ambi?

D.I.: ŋkwaayna.

K. : Mhmm?

D.I.: ŋkwaaynayad - mbɔɔŋkwaay -

K. : Mhmm !

D.I.: Si - si - sinnokoaminni.

K. : ŋkwaayna - bɔyigasupibinɔwam - amfɔbilebaanabibiyaledakwaay.

D.I.: Ay - bi - bi - binleday. Bigwaakapeembisaampibiwɔsinaŋgasubi?

K. : Biyaɲɲm .

D.I.: Bipannizaabi?

K. : Bivam.

D.I.: Bibivansɔy. Kibibib - ka - kabalɔam pannibisaanadaarkopibileebiidɔlaa?

K. : Mma - ɲeesiayuusibabi.

D.I.: ɲeesibeeni.

K. : ɲeesim.

2 - Text AJ in Morphemic Transcription (see pp. 70 ff.):

GWAA-RƆ YI3 NYINTA1 KAAKU, N6 YI3 TA-N1 NATINQA DAASI O
GWAA-RƆ NƆƆN1 K NAJOO1 / 6 YI3 TA-N1 BI1 PI1 TA2 ZAA1 LA2,
SEE ??? N6 N5 BILA1 PI1 BI1 MA1 N6 N5 BAAJOO2 / KALE N6
N5 NATINQA KU-N1. GWAA DIIN PANNI SA3 ??? A1 N5 A1 HINA
BA1, A1 N5 AJOƆ3 / A1 DAARKO PI1 BI1 MA1, A1 N5 TƆ2 LA2
A1 N5 KIN, DIIN BI1 PEEN SA3, A1 N5 PIAJOO4 / 1 BI1 WUU2
PIIYA, A1 N5 TƆ2 O, A1 N5 BƆ5 PI1 BI1 BIDI-YAA3 O, DIIN
N5 DOR SAAJOO5 / 3 KAN SE KI1, A1 N5 GASU PI1 BI1 NƆ1 N3,
A1 N5 TA1, A1 N5 A4 FƆ1-BI3-LE5 BAAJOO6 / 1, A1 NƆƆN2 ZE1
A1 N5 TA1. A1 N5 BƆ5 GAN BI1 LA2. GWAA-RƆ KAAKU-RƆ
NƆƆNAJOO7 / 1 NKA Y2 A1 DAMA A1 N5 BILA1 PI1 BI1 MA1 A1 PANQA
N3 GE1. . MHMM WEYL HINA BAJOO8 / Ɔ3 A1 GASU PI1 BI1 NƆ1,
A1 N5 FƆ1-BI3-LE5 KA3 SAA LA2, A1 N5 A1 BI3 BI1, BIAJOO9 /
1 A1 DAMA, A1 N5 LEDA KWAAY. . ??? IBII I DAMA IBII PEEN SA3,
I PI1 BI1 WƆSAJO10 / I-N1 KOO2. . BI1 A1 NYA-N3. . BI1 GWAA
K A1 PANNI SA3, A1 ??? N5 A1 DAARKO AJO11 / PI1 BI1 LA2 BI1
. . BILA1 A1 PANNI BI1 PANQA N3. . AY PANNI BI1 SƆ1 K IBII
SAJO12 / A3 I DAARKO PI1 BI1 LA2, TEN K IBII LEE2 KU, I
TƆ5 LA2 BI1, A1 GASU PI1 BI1AJO13 / NƆ1 N3. . AHH PANNI A1
PANQA, PANNI KANQIDA SIIM1 A1 BI5 GASU-N1 PI1 BI1 NAJO14 /
Ɔ1 O SIIM1. . MM PANNI POORI SƆ1, PANNI GUTA BEE1 N2 Y1. .
ENIWEE A1 NYEESI AJO15 / N2 PI1 SƆ1. . A1 NYEESI BEE1 N2
BI1. . A1 N2 BI1. . N6 KWAAY NAA. . MHMM . . N6AJO16 /
KWAAY NAA A1 DAMA NBƆƆN KWAAY ??? SI5 N4 NOKO A1 MIN5
N3 Y1. . N6 KWAAY NAAJO17 / BƆ3 YI3 GASU PI1 BI1 NƆ1, A1
N5 FƆ1-BI3-LE5 BA1 A1 N5 A1 BI3 BI1, A1 LEDA AJO18 /
N6 N3 KWAAY. . ??? BI1 N4 LEDA Y1. BI6 GWAA K A1 PEEN BI1

SA3 A1 N5 PI1 BI1AJ019 / WƆSI, A1 N5 GASU BI1 Y2. . BI1 A1 NYA-N3. . BI6 PANNI ZAA2 BI1. . BI1 VAN1AJ020 / . . BI1 BI5 VAN1 SƆ1 Y1. . ??? K A1 BA1 LƆ4 Y2, A1 N5 PANNI BI1 SA3 A1 N5 AAJ021 / 1 DAARKO PI1 BI1 LA2 IBII DƆ1 RAA . . NYEESI A1 YUUSI BEE1 BI1. . NYEESI BEEAJ022 / 1 N2 Y1. . NYEESI N2. .

Notes:

1. For computer input the O/Ɔ contrast is represented by numeral zero/literal O.
2. (NQ) represents /ŋ/ : (NY) represents /ɲ/
3. (???) marks hesitations omitted to yield 'prose'(p.19).
4. (. .) marks end of utterance.
5. The above shows the M.T. as used for computer input.(p.20); the 80-character cards are separated by slashes and the card-reference numbers underlined.

3 - Text AJ in Reading Transcription (see pp. 72 ff.):
(with translation: other texts in R.T. see Appendix B)

Problem Narrative: "Crossing the River"

David Isa Banka, Kaasim - 18.5.68

D.I.: Gwɔɔ yi nyinta kaaku, n yi ta-n natiŋa daas'o.
Once upon a time there were 3 men, they were going to a village market.

Gwɔɔ nɔɔn ku'n / yi ta-n bi, pi ta zaa la 001
As these men were going, there was water on the path

ɛɛe - ni - ni'bila pi bi ma ni'n ba/ka-le ni'n natiŋa ko-n 002
so they would have to cross it before they could get to the village.

D.I.) Gwaa diin panni sa, a n a - aaa - hina ba - a n / 003
One man took a thread, and he - he - thingummied - he

a daarko pi bi ma, a n to la, a n kin.
stretched it over the water, stepped on and went over.

Diin bi peen sa, a n pi / bi wuu piiya, a n to'o 004
Another took a knife, cut the water in half, stepped in

a n bo pi bi bidi-yaa'w . Diini'n dor sa / 005
and crossed in the middle of the water. One took a pot

kan se ki, a n gasu pi bi no n, a n ta, a n fo-bi-le ba/006
and fire, got into the water and went and cooked food

a n noon ze, a n ta, a n bo gan bi la. Gwoo kaaku-no noon/007
dived in, and went and crossed on foot. These three men

nka'y a dama a n bila pi bi ma a paŋa n ge?
who made the most determined effort to cross the water?

K.: Mhmm, weyl, hina / - bo ya gasu pi bi no'w 008
Mm, well, whatsit - the one who went into the water

a n fo-bi-le ka saa la a n a bi bi, bi/ ya dama a n 009
leda kweay
cooked food and ate it, he made the best effort of all.

D.I.: Bi - ibii y'i dama ibii peen sa i pi bi wosi/n koo? 010
Yo' - could you cut water with a knife?

K.: Bi ya nya n.
He came second.

D.I.: Bi gwaa k'a panni sa, a - a - a n a daarko/ 011
What about the man who stretched a thread

pi bi la bi?
over the water?

K.: Bila a panni bi paŋa n !
He crossed by the strength of the thread !

D.I.: Ay ! - pa - panni bi so k'ibii s/a i daarko pi bi la 012
No ! If you stretched a thread over the water

ten k'ibii lee ku, i to la bi, a gasu pi bi/no n. 013
by the time you got there and stepped on it it would go into the water !

K.: Ahh ! Panni a paŋa - panni kaŋida siim
Ah ! The strength of a thread ! A solid thread

a bi gasu-n pi bi / no'w siim. 014
won't go into the water at all !

D.I.: M'm ! Panni poori so, panni guta bee n'y.
No ! It's only a little thread, not a big one.

K.: Eniwee, a nyeesi / n bi so. 015
Okey-dokey, that's the solution as well.

D.I.: A nyeesi bee n'i. K. : A n bi.
It's not the solution. It is.

D.I.: N kwaay naa... K.: Mhmm?
All of them now... Mhmm?

D.I.: N / kwaay naa ya d - nboon kwaay - 016
All of them tr - all of these -

K. : Si - si n noko a min n'i. N kwaay naa/ 017
None of them was better than his mates. All of them

- bo yi gasu pi bi no'w, a n fo-bi-le ba bi,
the one who went into the water and made food

a leda / ni' kwaay. 018
he beat them all !

D.I.: Ay ! Bi - bi - bi n leda'y ! Bi gwaa k'a
No ! He - he- he wasn't best ! What about the man who

peen bi sa a n pi bi / wɔsi n, a n gasu bi'y? 019
cut the water with the knife and went in?

K. : Bi a nya n. D.I.: Bi panni zaa bi?
He came second. What about the one with the thread?

K. : Bi van ! 020
He's last !

D.I.: Bi bi van sɔ'y ! K'ibi-bi-bib - k'a - k'a ba lɔ'ɔ
He's not last either ! if yo-yo-you - so he - how did he manage

a n panni bi sa a n a/daarko pi bi la, ibii dɔ laa? 021
to stretch a thread over the water, do you know?

K.: Nyeesi a yuusi ba bi.
There is a groovy solution.

D.I.: Nyeesi bee n'i. K. : Nyeesi n. / 022
There's no solution ! It is the solution !

APPENDIX B

- A SELECTION OF TEXTS IN READING TRANSCRIPTION :

Text AJ appears in Appendix A above in Phonemic, Morphemic and Reading Transcriptions. Here we present Texts AA - AI and, to complement this sample of shorter Texts, mainly monologues, we then give Text AX in its entirety - a conversation and the longest Text of the Corpus.

Reading Transcription conventions are detailed in 1.5.3, pp. 72 ff. : in this Appendix each line has a translation into English intermediate in status between the literal Gloss and the free translation of the Examples in the body of the thesis (see pp. 75 ff.). Reference to the punch-card based numbering system (cf. p.76) appears in the right-hand margin, the card-ending being indicated in the body of the text with a slash.

TEXT AA

Monologue: "I am Hamiidu."

Hamiidu: 14.2.68

Mɔɔ to Hamiidu. Mɔɔ n tuu-ma Karatees'o.
My name is Hamiidu. I come from Karateesi.

Mɔɔ bor Sukur Wuriyaŋa naa'w./ Mɔɔ zi to Aweliŋa. 001
I come to Wuriyanga School here. My father's name is Awelinga.

Dan a n a wu-n. / 002
He is a farmer. ('Farm he it works')

TEXT AB

Monologue: "A Family Festival"

Hamiidu : 6.3.68

Moo kan m kemma-ro ki baaba-ro ki, ni'n bee kide.
Me and my elder-brothers and fathers - they brewed beer.

Ni'n foona ze kan/siiru ki, ni'n mani-ro binba. 001
They killed goats and sheep and made the ancestor-offerings.

Gwoo n bor, n a ze ko la, ni'n sara / binba. 002
People came and gathered together, and they had a party.

N a bo, ni'n doo. A nyinta baa. Fin bi-duu
They left and went home. It was jolly nice. That day

moo n bor sukur'o'y./ Sara-baa bi miŋa !/ 003/4
I didn't come to school. It was a good party !

TEXT AC

Process Narrative: "Brewing Beer"

Hamiidu: 13.3.68

Ku'n wu k'a bee kide naa n tr'a ba:
When they want to brew beer this is what they do:

- tri kisa bi lo, n a to pi/la. 001
- grind sprouted-guineacorn, they put it into water.

A n bi piyen. N a keeso'w. N a ka
It ferments. They skim it off. They put it

saa la. A ma. N a keeso'w. / 002
over the fire. It is ready. They skim it.

N a to'ɔ sipi-rɔ'w. A n bi piyen sunsa.
They pour it into big pots. It ferments again.

N a ya n a keesɔ'w. N a to'ɔ - dooru - dooru bɔ'ɔ. 003
They skim it again. They pour it into - pots - the pots.

N a peer ba. Kun bee bi ma, n a zi/ze la. 004
They make it sour. When the beer is ready they skim it.

Naa yiirfir n bi lee n. A n a ba-n yiirfir.
This is "Yeastless", that time is. It will become 'yeastless'

n a to'ɔ sipi-/ro'w, ni'n yiibo da la, a n a ba bee. 005/6
They pour it into big pots, and add yeast, and it becomes beer.

TEXT AD

Monologue: "Family Pride I"

Hamado Awudu: 25.3.68

Wɔɔ zii-da to n Surawini. A dan to n Beni.
Our grandfather's name was Surawini. His younger brother's name was Beni.

A dan to n Diin. Wɔɔ/ zi-rɔ bɔɔ' diin to n Nanni 001
His junior's name was Diin. Our fathers, one's name is Nanni,

diin to n Ganpaaga, diin to n/Lokori, diin to n Awudu. 002
one's name is Gampaga, one's Lokori and one's Awudu.

Wɔɔ kemma-rɔ to n: diin to n Gingi, diin to/n Banka. 003
Our elder-brothers' names: one's name is Gingi, one's Banka.

Naa-nbɔɔn kwaay lu-ban-nɔ yi n par'ɔ....ehh ...nyi -
All of these have wives at home ... ehh ... child -

- Busoo ta'w, nyino ta/'w, fo faan n ta'w, siiro ta'w 004
We have money, children, everything - we have horses

bida-ro ta'w, fo faan n ta'w./ Moo miŋa to Hamado./ 005/6
donkeys, everything. My own name is Hamado.

TEXT AE

Monologue: "The Farmer's Ambition."

Friend of Hamado: 25.3.68

Siili naa k'a n'i ze-n naa', moo le n ta ku'm ta Beŋo'w
This farming-season coming I want to go to Bimobaland

moo fo/-sila ye - sinkaan ka gandaaw. Ku'm a yi 001
and beg a farm-plot...grow lots of groundnuts. When I get it[1]

ku'm a sa m fuu sin. Ko naa / nyinbon-no noon 002
I want to buy a shirt with it[1]. The girls round here

mii-yaa bri gwaa sa-le'y. K'ibii y'i ka-le ma / 003
won't look at a man; if you are chatting them up

ni'n diga-l'a miŋa ma kir. N br'a da-le ibii zi
they look on themselves as chiefs. They won't notice you

k'ibii yi pile / ni' "Lo'o?", n br'a ma-le'y. Bugur'o 004
- if you say to them "How about it?" they won't listen. At Buguri

nyinbon-no ta'w paa/...Garu'w n ta'w, Tinpaan'o n ta'w 005
there's plenty of girls...and at Garu, and at Timpaani,

Bako'w n ta'w. / 006
and at Bawku !

[1] i.e. the proceeds from selling the groundnuts

TEXT AF

Historical Narrative: "The Founding of Wuriyanga"

Idriisu: 29.4.68

Seeku zi bi, k'a tuu-n Bako'w - a da sii-da'w,
Seeku's father, when he left Bawku - he rode on a mare,

a n bor Wuriyaŋa - Wuri/yaŋa naa'w, a n Wuriyaŋa kinta, 001
he came to Wuriyanga - here to Wuriyanga, he founded W.,

a n daasi kinta. Wuriyaŋa a miŋa. Da/k'a n a birin, 002
he founded the market. Wuriyanga is good. As he rode a mare

n yi ko naa birin 'Wuriyanga'. Da a sii-da'w, / 003
they call this village 'Wuriyanga'.* He rode on a mare

a n bor naa'w, bi ya ka n yi ko naa biri-n Wuriyaŋa. 004
and came here, that is why they call this village 'Wuriyanga'.

* from Moré 'wẽdnaga' - "mare" (Seeku is Mossi headman)

TEXT AG

Letter: "How to Write a Letter in Lisa"

(Hamiidu's ad hoc spelling revised to match remaining texts)

Hamidu Awelinga,
c/o L.A. Middle School,
Worinyanga via Bawku, U.R.

Moo Kemma,
My elder-brother,

A nyinta moo ma guta moo n yi ki naa ba-le
I am very pleased to be writing you this letter

ku'm a ka ibii'w./ Moo yi naa'w ku'm laaka da awo laafi ma 001
to give you. I am here to ask after your health,

- kammaan moo n a teedaka/, laafi ta'w. Woo ta naa'w 002
- as I suppose, you are well. We are here

kan laafi ki. Ku'n wusa woo ma liifu moo ze-le/ 003
in good health. When they give us a holiday I will come

m bi diga awo ma. Seedu kan Lamusa ki w'a ze-le
to see you. Seedu and Lamusa say they will come

awo zi bo'o,/ a bi diga a ma; ku'n ya a bo ni'n yi ze-le 004
to your place to see you; when they leave to come (home)

k'i ka kun Haruuna n bor kani'n ki.
please let Haruuna come with them.

Par zanno kwaay yaada-l'awo n,
All the house-owners greet you.

moo n ibii dan,
I am your younger-brother,

Hamidu Awelinga./ 005

TEXT AH

Process Narrative: "Farm Work I"

Hamiidu: 4.5.68
(written down, read from script)

Zi ku'n t'a ba biiyo'w bi naa: leeka n t'a wu
This is the work they do in the rainy-season: They make a start

ni'n pawo ze, / ni'n se da ma. Kun la ba 001
they cut the stubble and burn it over. When it has rained

diin koo piiya ni'n lee bugu kan diiru ki / 002
once or twice they turn over the soil with oxen

ni'n buguntu bo'w n a da poora boo' ma.
they take out manure and put it on the fields.

Kun la guta bi ba ni'n/ boka-le ni'n dan ze 003
The big rain comes and then they work the farm

kan diiru boo' ki, ni'n fo duu kele./ 004
with the oxen, and then they sow.

Zi ku'n t'a ba ni'n boka-le ni'n fo duu bi naa. / 005
The work that they do before they sow is as above.

TEXT AI

Monologue: "Family Pride II"

Adamu Salaam: 9.5.68

Fo ta woo par'o guta - yeena - naana - Alhamdulillay,
There's plenty of stuff at our house - yee - nee-benedicatur

woo yaada Wusu'n barka - guta: / dir ta'w, kor ta'w 001
we thank God - plenty: there are cows, hens

bir ta'w, siiru ta'w, ga-no ta'w, gwaa yar/n ta'w 002
goats, sheep, guinea-fowl; there are menfolk

nyin-no ta'w so. Diinaa diinaa naa' fo-si n daanda ba
and children too. Right now nothing troubles

woo ma/'y; see, dee, Wusu yi diin, gaafara ! / 003/4
us; but, indeed, God is One, miserere !

(Text AJ - see Appendix A)

TEXT AX

Conversation: "About Guta" or "Mr.Big"

(Abdurrahman nicknames his brother Saalifu 'Guta', and the jokes turn on the meaning of this name - "big".)

Abdurrahman, Issaaka, Modu - 1.8.68

IS: I sooda ki.
Good evening.

AM: Sooda zii n.
Good evening.

IS: Laafi?
Well?

AM: Sooda zii n.
Good evening.

IS: Mii-si ba'w'i? /
No trouble?

AM: Par zii n wa ! 001
All's well at home, indeed !

IS: Laafi n bala !
All's well of course !

AM: I par lan-no zii n?
Are the women at home well?

IS: Laafi !
Well !

AM: Mii/si ba'w'i..kan i ta ki.
No trouble...welcome ! 002

IS: Nan baa. Ta ibii ka'y?
Thank you. Where are you going?

AM Ah ! Ta moo wu/ poo'w. 003
Ah ! I'm going to the fields.

IS: K'i a bo ba'a?
What to do?

AM: Moo wu "Guta n'i bo, a moo bil."
I said "Guta has gone out, he called me."

IS: Guta n/'i?
Mr.Big, is it?

AM: Mmm ! Woo ko Guta bi. 004
Yup ! Mr.Big of our place !

IS: Saalifu n'i kir n bi raa ?
Saalifu, your chief, is it?

AM: Eem ! A n bi. Woo/ ko kir bi. 005
Yeah ! That's it. He's chief of our place.

IS: Bo a n a ba-n bo'o?
What's he doing there?

AM: Dan a n a wu-n.
Working a farm !

IS: Moy n/ge, fii-yaa n'i?
Is it rice, or millet?

AM: Hina n- moy n'i? Moy ta'w, fo-yaa ta'w. 006
It's whatsit - rice is it? There's rice and millet!

IS: Ah! Gwaa/ dan diin wu-n binke diin'o-piiya-raa?
Ah! Can one man farm in one - two places at once?

AM: Ibii n a ma n wu "A to n Guta"/koo? 007 008
Didn't you hear - he's called 'Mr.Big'?

IS: Ha! ha! ha!
Ha, ha, ha!

AM: Bo n wu "A to n Guta" bi, gwaa diini'n bi kunta moy/009 -sila bo'o, gwaa diini'n'i fo-sila bo'o ge? Baa a n kiri'n bi, a/guta. Ta tr' 010 a wu a n a fii-yaa bi ka, a n gwoo bil n a/wu paŋa n.011
As they say he's called 'Mr.Big' one man is bending over the rice-field and another over the millet-field. As he's a chief he's big! He goes and works the millet, and calls people to work hard (on the rice).

IS: Ibii yi naa'...
But you're here...

AM: Moo - a par nyi moo n. Ku'moo ta moo ya/gwoo nyaso, a n b'a ta n a dan bi wu. 012
Me - I'm his brother. I have to go and catch his people to come and work his farm.

IS: Ba a lo a n moo nyaso/kina'y?
How come he hasn't caught me yet?

AM: A n ibii nyaso...a n ibii ku kina'y. Ba a gaasiba 013 n ibii n/ ibii biisi bi, 014 a le ba k'a yibii nyaso'y.
He hasn't caught you...he hasn't got to you yet. As you're an old friend of his he didn't want to catch you.

IS: Oh! A foon n ta'w bi/raa?
Oh, he's clever, is he?

AM: Mmm! Ibii nwa a wu, a n ibii tuu. 015
Yup! He's fond of you, so he left you alone.

IS: K'a moo nwa, bo a ka-n/ moo'w'i?
If he's fond of me, what will he give me?

AM: A fo ka-lo ibii'w - a wu k'a ya a n a tuu'w - k'a ta - k'a/??? ta a ko'w - 016 017
Apa Volta'w, k'a tuu k'a ya ??? moto sa diin/ a b'a ka ibii'w kan lori ki, ibii n bri zi ba ni'. 018

He'll give you something - he says when he comes back again - when he goes - when he...goes to his country - to Upper Volta, when he comes back he'll...bring you a motor-byke and a lorry so that you'll be able to work with them.

IS: Ku'm bri/ta ni' ko bo'w?
So that I can go where?

AM: K'i da moto bo'o, ibii duniya nyinta-baa bi-ni/ k'i lori bi ka, n a ka busoo ma n br'a ka-le i'w. 019 020

When you ride the motor-byke you can enjoy life with it; when you drive the lorry they'll look out money to give you.

IS: Woto, an k'i /duniya nyinta-baa bi, ibii ga-n koo?

But perhaps when you have enjoyed life you'll die, eh?

AM: I ga-n. I duniya nyinta-baa/do. An k'i zu-n Wusu'w so. 021 022

You'll die ! You have known enjoyment of life, but you should follow God too.

IS: Bi miŋa !
That's good !

AM: Gaasiba-baa nyinta-baa n/ bi. 027
That's the joy of friendship !

IS: Mmm (clap !) m' !A n lo a bri ze-n moo par'o'y?
Mmm (clap !) m' ! How come he won't come to my house?

AM: A bri bo-n/ biiy'o wa ! kun kwiiye bee n'i, a bri bo-le'y. Ibii n a ma n w/ "A to n 'Guta' " raa? Woo yi nyii ba-ni' paa. Gwaa guta n. 024 025

He doesn't go out in the rainy-season, when it's not dry. Didn't you hear he's called 'Mr.Big'? We're scared of him, he's a big man.

IS: Ah ! A/n a ba lɔ'y? A n a ta-n bite'w, a n'i dan bi wu-le ge?/

Ah ! How does he manage, if he won't walk on the mud, to work his farm?

AM: Bite'·? - bidama-kyaa n ta'w, a bi tala'w'i, a bi bidama'y; a n tr'a/ka-n tala la - fuuu ! - zii n. A n a kinta, a n bi diga ma, a bi/ bidama'w a bi tala 'w sɔ'y. Gwɔɔ n dan bi wu n a fer,/ wɔɔ n bɔk' ɔɔ doo keede. 026 027/8 029 030

Mud? - He has an aeroplane, not on the ground or in the sky . He lands it - plop ! gently. He puts it down and looks - it's not in the sky or on the ground. The people do the farm-work, and then we go home.

IS: A par bi ko la bɔ n'i?

What sort of roof is there on his room?

AM: Kensi n kwaay. / 031

It's all pan. (corrugated metal)

IS: Pɔyaa zalga n ge?

It's tin thatch?

AM: Mhm ! Pɔyaa zalga ki - finn !

Yeah ! With tin thatch, zap !

IS: An bɔ yi zaa ze, a n/a za a par bi ma?

And what made the road - the road to his home?

AM: Katapiila n ! 032

A Caterpillar(-tractor)!

IS: Tɔɔ, Modu, ibii naa yi diin raa?

O.K., Modu, have you ever seen (anything like) this?

MD: Ah !/Mɔɔ - mɔɔ n Guta dɔ diin laa, Guta-baa bi, a ba a n a-le nbɔɔn ko/ zi-zi bɔ'ɔ. 033 034

Ah ! I - I never knew (such a) Mr.Big ! The greatness he exercises over at their place !

All: Ha ! ha ! ha ! ???

Ha, ha, ha ! ...

MD: ...a bi nyinta-n miŋa'y !

... it won't turn out well !

AM: Oh ! K'a nyii/ba n woo !

Oh, you-all should be afraid of him !

IS: Oh ! Awɔ n'i nyii ba-ni' zi ! 035

Oh, you lot are scared of him !

AM: Ah ! A ya suu wɔɔ'w kwaay, la !

Ah ! He rules over us all, now !

IS: Ay !

No !

AM: A ya suu woo'w. Ammaa a duu n woo n.
He rules over us, but we are his tribe.

IS: Ammaa guta-baa bi.../ 037
But greatness...

AM: Eh ! A n a ka woo'w. A n kiri-baa ka woo'w. Kiri-baa - lah !- ah ! woo/ n a sa oo suu-n awo'w so. Mhmm awo n a suu woo'w kwaay. 038

Eh ! He gave it to us. And he gave us the chiefdom. Chiefdom - aha ! - we took it and we rule over you lot, too. Yup ! And he rules over all of us !

IS: Diin - gwaa/ k'a foon n ta'w... 039
One - the wise man...

AM: Gwaa k'a foon n ta'w.
The wise man.

IS: ...kan yalima ki...
... and the fool...

AM: Yalima ki./ 040
And the fool.

IS: ...kan bide ki...
... and the wizard...

AM: Bide ki.
And the wizard.

IS: ...kan zii pi-le zaa ki...
... and the silent man...

AM: Zii pi-le zaa ki./ 041
And the silent man.

IS: ...kan geeŋa ki:
... and the idiot:

AM: Geeŋa ki.
And the idiot.

IS: A kalo'y?
- How many does that make?

AM: Moo n a le sa a / kalo'y 042
I didn't count how many.

AJN: A soor laa?
Is it five?

IS: K'ibii foon n ta'w k'ibii le do.
If you had any sense you should know the number.

AM: A soor.
It's five.

IS: Eheem ! / An gwaa k'a ba naa'w'i a ba a ba n lo'y? Bi n ba a tuu, a/n a do a w'"A soor"bi. Bo ibii n'i foon da-n ma'y?

Yeah ! But a man who doesn't belong here sits over there and knows that it's five, how does he manage it? What are you thinking of?

AM: Guta moo/ni'm foon da-n ma. Bo moo bor bi, m bi naasile ba naa naa; k'a ya a n ba/moo n lo moo n a do'y. 043 045 044 046

I'm thinking of Mr.Big ! As I've been hanging around here now, what he'll do to me I don't know !

IS: Guta bi - Wusu n raa?

This Mr.Big - is he God?

AM: Wusu bee n'i./ A yi nyii ba-n Wusu n. 047

He isn't God: he fears God.

IS: Awo n'i nyii ba-le awo n.

You lot fear him !

AM: Woo/ nyii ba-n Wusu n so, oo ya-le oo n'i nyii ba-le awo n. 048

We fear God too, and then we fear him as well.

IS: Bi k'i/ga keede? Guta naa n i da se'w ge - Wusu n, a n i da se'w'i?

What if you died, then? Will this Guta put you in the fire, or will God?

AM: K'i ga / Guta baaga bi dor bo'o'y. 049 050

If you die, Guta won't bother with you any more.

IS: Kaay ! Nwaari n bi ! Ha ! ha ! ha !

Blimey, that's a lie ! Ha, ha, ha !

AM: Nwaari bee n'i ! / 051

It's no lie !

IS: Nwaari n bi !

It's a lie !

AM: Bale Wusu yi guta-baa bi ka'w.

But God was the one who gave him his greatness.

IS: Ayy !

No !

AM: A w'a / n a bi duniya'w. 052

And said he should enjoy it in the world.

IS: Too !

O.K. !

AM: A ya-le a n'i nyii ba-n Wusu n so./ 053

And he, again, fears God too.

IS: Bi Guta bi naa....
This here Guta....

AM: Mmm.
Mmm.

IS: ...been'o bi, yaa !
...the year before last, in fact....

AM: Mhmm.
- Mhmm.

IS: ...woo n'i/sooda ba-le a par'o bi yaa !
...we were chatting at his house, in fact...

AM: Mhmm. 054
- Mhmm

IS: ...oo bi ta gwoo ku...
...we got to some people..

AM: Mmm. / 055
- Mmm.

IS: ...oo ta oo n'i sooda ba-le.
...we went and had a chat.

AM: ...gwoo ku; a ta, a n'i sooda ba-n./ 056
...got to some people; you went and had a chat.

IS: Ni'n b'a pi, n wu "Gwaa ta, a n a ga a gadugu la bi".
They came and said that "A man went and died on his bed".

AM: Nnn/ - gwaa ga a gadugu la. 057
Nnn - a man died on his bed.

IS: ???...Guta n nyiika koo? A feer a zar, nyiika/a ge? A n nyiika'y?
Did Guta cry? Was his heart broken? Or didn't he cry?

AM: A feer a zar, a n mii bo'w. 058 A da/bi a bo'w. 059 A wu "Gwaa yi ga."
He was heartbroken, and never breathed again. Shock killed him. He said "A man is dead."

IS: Mm, ba abo ta keede bi, bo a yi gadugu/bi la'y?
Mm, then when he went there, what did he see on the bed?

AM: Ba a ta bi, a a gwaa yi. Ammaa ??? gwaa bi ga-le, a bon bee bani. 060 061
When he went, he saw a man. But...the man is going to die - he's no use !

IS: Gwaa bi to...
The man's name...

AM: A do wa ! A w'a mii bo'w.
Of course he knew he was dead !

IS: Gwaa to n bo'y? — What was the man's name?

AM: Gwaa bi to n Sanpa. Amaa a me nyiika. — The man's name was Sampa. But he passed out. 062

IS: Sanpa? — Sampa?

AM: Eeem ! / — Yup ! 063

IS: A kiso n ge? - Ko-laatu-la gwaa n'i? — Was he his neighbour? - or from far away?

AM: A lo n. — He was his slave.

IS: A lo Sanpa n laa? / — Sampa was his slave, eh?

AM: Aam ! — Yeah ! 064

IS: E' ! A n a ka Sanpa'w, a n a ka Saalifu'w daa n bi wa ! / — Eh ! He gave it to Sampa, and he gave it to Saalifu as well, surely !

AM: Oooh ! A soogya n, bala ! Boko-n i wu "Heh ! A nyii ba-ni' paa !" 065 — Oh ! He was his soldier. It's like you said "Heh ! He's scared stiff of him !"

IS: A nyii / ba-ni' . — He's scared of him.

AM: A nyii ba-ni' . — He's scared of him. 066

IS: Too - bi - bi k'i diga keede naa', yaa ! Guta../ — O.K. - wha - what do you reckon, then, now - I say ! Mr.Big...

AM: Mmm? — Mmm? 067

IS: ... a to n bo'y? — ...what's his name?

AM: A to n 'Guta', bala ! a to ku'n a bil ma bi/ woo bi ye-le - nka n'i ye-n? - k'a ya bi pi a bil ma'a. — His name's 'Mr.Big' of course ! The name they gave him, we won't allow - who would? - you to go and call him this . 068

IS: Wusu to/k'a ka bi, awo n'i nyii ba-n bi bil ma? — God's name that He gave him, are you scared to call him by that?

AM: K'i zi ta'w, yaa ! — If you had a father, I say ! 069

IS: Mhmm?
Mhmm?

AM: Nn gee ibii do i w' a to n kina'w, i boka-le i n'i a bil-le/i zi? 071
Then would you know that his name was so-and-so, and then go and call him 'Father'?

IS: Mmm...
Mmm...

AM: An bo ya ka ibii n a bili-n Wusu to k'a ya pi, a/n a bil ma ma, i ta i n a bil-le i zi keede? 072
Then why don't you call him the name God spoke and called him by, but go and call him 'Father'?

IS: Bi moo wu ku'm ibii/lar bi.. 073
The thing I wanted to ask you...

AM: Hmm?
Hmm?

IS: Moo w"I nyasi nyasi."
I said "Hello ! "

AM: Moo wu "Nan baa."
I said "Hi ! "

IS: Ta ibii wu ka'y? /
Where are you going?

AM: Moo wu "Ta moo wu-n poo'w" 074
I said "I'm going to the fields".

IS: K'i a bo ba'y?
What to do?

AM: Dan wu gi'w. / 075
Work a farm somewhere.

IS: Moy n ge?
Is it rice?

AM: Moo wu "Moy n kan fo-yaa ki",
I said "Rice and millet."

IS: Ibii sinkaan ka raa?/
Do you grow groundnuts?

AM: Ah ! Moo sinkaan ka wa ! 076
Ammaa a ka moo n a-le m fo laa. Guta dan-no,/Guta 077
doola bi, woo n ta'w rah !
Ah ! Of course I grow groundnuts ! But I don't grow them for myself. They're Guta's farms, Guta's field. We're just there.

IS: Guta doola bi, n ta'w siim?
It's Guta's field, and they're just there, eh?

AM: Mmm. / 078
- Mmm.

IS: Ke naa k'ibii n'i nyinta-n bo'ɔ naa: - Guta ke n raa?

This room you're sitting in - is that Guta's?

AM: Guta ke beɔ n'i,/ ammaa, 079 naa-duu bi, Guta y'a suu'w kan a fɔ faan bi ki.

It's not Guta's room, but this, he is in charge of it, and everything in it.

IS: Bɔ ibii bor naa', Nasaara ibii bor n naa' ge? Guta n'i?

The one you brought here - did you bring the European here, or was it Guta?

AM: Mɔɔ m bor naa' - mɔɔ n 080 bor / ka'y? - ko naa' ge? 081 mɔɔ n bor ke naa'w?

I, I brought here - I brought where? - to this village? or I brought to this room?

IS: Ke naa naa.
This room here.

AM: Mɔɔ yi bor n, m/ bor 082 gi'w. Guta wusa mɔɔ ma mɔɔ n binbil, m tuu mɔɔ wu dan'o a n wusa/ mɔɔ ma - mɔɔ n 083 binbil, mɔɔ n kin, m binbil naa'. M b'a fɔ yi naa'w..084

IS: (simultaneously) Fɔ ta..

I was bringing.. I came somewhere. Guta gave me a holiday so I wandered, I left the farm - he let me - I wandered on, I wandered here. I came and saw something here...

There is something...

AM: ...mmm, Nasaara fɔ n. Ba n wu "Nasaara fɔ n bi", mɔɔ n a dɔ - mɔɔ n a yi-n - mɔɔ wu "Guta ta naa-duu n." 085 mɔɔ nyinta ku'm diga - bi mɔɔ nyinta mi'n'i / 086 sooda ba-ma naa...

... mmm, it was a European thing. When they said "That's a European thing" I knew - I was looking - that Guta has one of those. I sat down - as I sat and was chatting here...

IS: Bi sooda k'ibii ba naa'.
This chat you're having now...

AM: Mmm?

Mmm?

IS: Mii naa k'ibii n a/ ba-n naa' - booti n a sula ge? a bi sula'y?

This conversation you're having now - will it be repeated tomorrow, or won't it?[1]

AM: K'a sula, Wusu bi a/ka Nasaara bo'o raa? 087 088

If it is repeated, God gave it to the European, eh?

IS: Bi i boka-le i wu Guta ibii nyii ba-ni' keede/ bi...?

What about when you said before that you feared Guta, then?

AM: Iim ! An Wusu ya ka Nasaara'w. Too, Wusu bi ka Guta'w so. Iim ! Kun bi zaa ten baa paa a ya tuu-le. 089 090

Yeah ! But God gave it to the European. O.K., God gave this to Guta, too. Yeah ! when this fellow's time is up, he'll leave it behind.

IS: Bi ku'moo bor'o, m bi fuu ye Guta pa? /

What if I come over and beg a shirt from Mr.Big?

AM: Mmm? 091

- Mmm?

IS: K'a n a ka moo'w: ku'm a bil bo keede?

So he'll give it me: what should I call him then?

AM: A bil ibii a / n a-n 'Guta" wa ! K'i b'a ye so, a ka-le i'w. 092

You call him 'Mr. Big', of course ! If you come and ask, he'll give you one, too.

IS: A bil moo n a-n 'Saalifu'.

I'll call him 'Saalifu'.

AM: Oh ! K'i bil maa n, i bi gan yi-le i to la i doo'y. 093

Oh ! If you call him that you won't have a leg to stand on and go home !

IS: A par/ham - ka zi-zi a n ta'w'i?

Thic[2] house of his - whereabouts is it?

AM: A ko raa? 094

His town, you mean?

---

[1] The key to this section is tape recorder.

[2] Dialect (Bk.) form.

IS: Mmm !

Yup !

AM: Ɔɔɔ, heh ! A ko bi/ Nasaara ko poori n. 095

Oh, heh ! His town is a small European town.

MD: A tuu a wu Gwaayo'w???

He came from Gwaayo...

IS: A' ! Ha ! ha ! ha !
Guta ge? A tuu a / wu Sandogo'w - ha ! ha !

Ah ! Ha, ha, ha ?
Guta eh? He came from Sanogho - ha, ha !

AM: A n b'a bo Garango'w, a n b'a bo Tenkodogo'w/ a n b'a bo Bittu'w. 096 097

And then he moved on to Garango, then to Tenkodogo, then to Bittou.

IS: A n bor Ba...

He came to Ba...

AM: A n bor Bako'w.

He came to Bawku.

IS: Mhmm !/

Yeah !

AM: A n kin, a n bor...mmm... a n bo Bugur'o. 098

He went on and came ... mmm ... moved to Buguri.

IS: Eeem !

Yup !

AM: A n a bo Gwaado'w. / 099

He moved to Gwaado.

IS: Eem !

AM: A nyinta bo'o kammaan doolaa wala kan a zi ki; a b'a/ n a fer, a n bor Wuriyaŋa'w a n a Wuriyaŋa fir maw: a n/ a suu Wuriyaŋa'w kwaay, a zaa ba'w'i. 100 10_

Yup !

He stayed there about a million years, then went off and came to Wuriyanga. He's at Wuriyanga here today; he rules over the whole of Wuriyanga, he has no boss.

IS: A tuu a wu...eem ! Diga ! moo / ku'mi'm tuu - m tuu moo wu-n Bige'w ... m bor...Wagaduugu'w... 102

He came from...yeah ! Look ! When I left - I came from Abidjan ... I came ... to Ouagadougou...

AM: Yi ibii bo'o raa?/ Ibii- 103
ibii zii-da nyinta bo'o raa?
Ibii ko to n bo'y? Ibii
zii-da/ko? 104

Were you born there? You -
your grandfather, did he live
there? What's your country
called? -your grandfather's
country?

IS: Woo ko bi?
Our country?

AM: Mmm !
Yeah !

IS: Yi woo wu Bige'w.
We were born at Abidjan.

AM: Ibii zii-da naa nyinta/105
bo'o raa?
Did your grandfather live
there?

IS: Eeem !
Yup !

AM: Bige'w raa?
At Abidjan?

IS: A n bor moo n Wagaduugu'w.
He brought me to
Ouagadougou.

AM: Mhmm.
Mhmm.

IS: A/ n bor moo n Zabr'o.
He brought me to Zabré.

AM: Mhmm. 106
Mhmm.

IS: A n a tuu Zabr'o.
He left Zabré.

AM: Ahe !
Aha !

IS: A n bor eem - sss - eem-
Sonbiira'w.
And came to - er - ss- er
Sombira.

AM: Sonbiira'w. 107
Sombira.

IS: A n a tuu Sonbiira'w.
He left Sombira.

AM: Mhmm.
Mhmm.

IS: A / n bor Seebunn'o.
And came to Seebunni.

AM: Seebunn'o. 108
Seebunni.

IS: A n a tuu Seebunn'o, a n bila Bako'w.

He left Seebunni and crossed to Bawku.

AM: Ta awo gan ma ge? Da awo lor'o'y? 109

Did you go on foot, or by lorry?

IS: Ta woo wu - ta woo wu/ gan ma ge? Ibii, woto, ibii i tuu-n ka n k'i ta i gan ma? - nkan - i/ ta-n lor'o'y?

We went - we went on foot? You, I suppose - where do you come from if you go on foot? Whe- you go by lorry?

AM: Ooo ! Woo busu n a wu woo ko'w. Bo woo nyinta bi,/ kin-no woo 112 n. N a busu n a m a da 111 zaa'w. 110

Oh ! They gave us a lift to our country. There we lived and were chiefs. They gave him a lift - they they went - I - put me on the road.

IS: Woo n baa bila Bugur'/o.

We came across to Buguri.

AM: Mhmm. 113

Mhmm.

IS: Oo bor Wuriyaŋa'w.

We came to Wuriyanga.

AM: A bor a n'i naa'w fir naa.

You came and are here today now.

IS: ŋŋŋ / ! A karan bi.

Yeah ! That's all.

AM: Kan i ta ki. 114

Thank you for coming.

IS: Mhmm. Kan i fo ki. / 115

Mhmm. Thank you.

APPENDIX C

VOCABULARY:

This Vocabulary gives the most common Bisa Morphemes and those occurring in the Texts presented in Appendices A - B above.

The Entries consist of a Key in Reading Transcription (see p.72) but with a super - script homophone-index (p.70), a syntactic index, and a simple English gloss.

The syntactic index indicates:

Particles (7.2)	-	SF
Word-Classes (6.2.1-3)	-	N,Dem,Adj, Ajnc, Quant,Num,Pn,PrN, Adv, Id, Int, V
Verb sub-Classes	-	as in 6.2.4
Suffixes (6.3.2)	-	Sx
Relators	-	Rr

A

a^{1}	: Pn :	(3rd.sing.)
a^{2}	: Pn :	(2nd. pl.)
a^{3}	: Pn :	(3rd. pl.)
a^{4}	:V.Ba:	go and (3l.4.2)
abo	: Pn :	(3rd. pl.)
awo^{1}	: Pn :	(3rd. sing.)
awo^{2}	: Pn :	((2nd. pl.)

B

ba^{1}	:V.La:	do, make, become
ba^{2}	:V.Eb:	not be/exist
-baa^{3}	: Sx :	(abstract noun)
baa^{4}	: Int :	very
baaba	: N :	father, dad
baga	: N :	care, fault
bana/bani	:SF:	(4.4.1.4)
barka	: N :	thanks
bee^{1}	: SF :	(negative)
bee^{2}	: N :	pito, beer
been^{1}	: N :	bird
been 2	: N :	year before last
bi^{1}	: Dem :	the , this

bi[3] :V.Cf: eat

bi[4] :V.Ba: come and

bi[5] : SF : (negative)

bida : N : donkey

bidama : N : sky

b.-kyaa: N : aeroplane

bide : N : wizard

bidi : N : centre

b.-yaa[3]: N : very middle

biisi : N : long ago

biiyo : N : rainy season

bil[1] :V.Lc: call

bila[1] :V.F : cross

bile : N : right-hand (Bk.)

binba :V.Cf: do repeatedly

binbil/r:V.F: wander about

binke : N : place

bir[1] : N : goat

bir[2] :V.Lc: (= bil[1])

bisi : N : right-hand (Lb.)

bisu : N : outside

bite : N : mud

bo[1] : N : what?

bo[2] :V.Hb: go/take out

bo[3] : SF : (3.1.1.1)

bo[4] : SF : the one that (5.3.3)

bo[5] :V.Hb[R]: move on to

boka-/ baka- :V.Aa: (3.1.1.4)

boko :V.Ec: resemble, be the same as

bon : N : usefulness

booti[1] : N : tomorrow

bor :V.F : come

bor...n[3] :V.F : bring

bri[1] : SF : (negative)

bri[2] : SF : (inceptive:4.5.6)

bugu :V.Cf: turn over (soil)

buguntu : N : manure

bunbwee-da:Adj: bright red

busoo : N : money

busu[1] :V.D.: lift, carry

busu[2] :V.Cf: pain, hurt

D

da[1] : N : mother

-da[2] : Sx : female

-da[3] : Sx : -coloured

da[4] :V.Fb: drop, fall

da[4]...o :V.Hb: ride

da[4]...zi:V.Hb[R]: take notice

da[4]..ma[1]: see foon[2], laaka

da[5] bo'w : N(O)+VP: hiccough, shock.

-da[6] : Sx : (aggranditive)

daa : Adj : new

daanda ba[1]...ma[1] : N(O)+VP+NP(IO): give trouble to

daarko :V.Hb: stretch across

daasi : N : market

dama :V.Gb[R]: be able

dan[1] : N : farm

dan[2] : N : younger brother

diga :V.Ka: look at/upon

diin :Num : one

diinaa/diitaa : N : right now

dir[1] : N : cow, bovine

dir[2] :V.F.: climb

do[1] :V.Cb: know

doola : N : farm, field

doolaa : N : year

dor :V.La: continue

doo :V.F.: go home

dor : N : medium-sized pot

duniya : N : world (Ar.)

duu[1] : N : tribe

duu[2] :V.Cf: plant

duu[3] : N : a plant

-duu[4] : Sx : -here (Dem)

F

faan :Quant: all (Mo.)

feer : N : heart, lower chest

feer ka :N(O)+VP: be brave

feer...zar:N(S)...VP : be sorry

fer :V.Hb[R]: depart

fii-yaa[2]: N : (=fo[1]-yaa[2])

fin : N : day, date

fo[1] : N : thing

fo[2] :V.Ae: blow (wind)

fo[1]-bi[3]-le[5]: N : food

foon[1] : N : offal (esp.liver)

foon[2] : N : sense, thoughts

foon[2] da[4]...ma[1]: N(O)+VP+NP(IO): think about

foona : N : goats and/or sheep

fo[1]-si[5] : N : anything (+neg.)

fo[1]-sila : N : millet-farm

fo[1]-yaa[2] : N : grain, millet

fu/fu-da[3]: Adj: white

fuu : N : cloth, shirt

G

ga[1] : N : guinea-fowl

ga[2] :V.Ae: be dry

ga[3] :V.Ae: die

gaafara : ? : pardon (Ha.)

gaasiba : N : friend

gaasiba-baa[3]: N : friendship

gadugu : N : bed

gan : N : leg, foot

gandaaw :Ajnc: big, great

gan-piin-kansa: N : toenail, claw

gasu :V.F.: enter

ge[1] : SF : (question:3.1.4)

geeŋa : N : madman (Mo.)

gi[1] : N : dog

gi[2] : N : a place

gin[1] : N : night

gin[2] : V.Cd : stand

gin[3] : N : enemy

gin[4] : N : yesterday

ginta : Adj : long, tall

gir[1] : N : egg

go : N : wood, tree

guta : Ajnc : big, much, many

guta-baa[3] : N : greatness

gwaa : N : man, person

gwaa-yar[1] : N : man, male

gyaa : N : stone, rock

gyaan : N : girlfriend, fiancée

H

ham : Dem : that (Bk.)

hina : N : thingummy

I

i : Pn : (2nd. sing.)

ibii : Pn : (= i)

K

k : SF : (7.2.2-

ka[1] : N : hair, feather

ka[2] : N : where?

ka[3] : V.Ga : give, allow, put.

ka[4] : V.Cf : grow (a crop)

ka[5]...ma[1] : V.Gc [R]+NP(IO) : look for, court (a girl)

ka[6] : V.Cc : cause

ka[7] : V.Cf : sate, be sated

ka[8] : V.Cf : drive (lorry)

ka[9] : N : nail, needle

kaaku : Num : three

kalo : Num : how many?

kammaan : SF : as, about (Ha.)

kan...ki[1] : Rr/SF : with, and (4.4.3.1)

kanpaala : N : maize

kansa : N : husk, shell, nail

kaqida : Adj : hard, difficult

karan : N : (= kalen)

karana : N : louse

ka[3] saa la[2] : VP+NP(IO) : cook (put on fire)

Katapiila : N : grader, tractor

ke : N : room, hut

keede : Adv : then (temporal and logical)

keeso'w : V.Cf : wipe, skim

kele : Adv : (= keede)

kemma : N : elder sib

kensi : N : pan (corrugated metal)

ki[1] : Rr/SF : (see kan)

ki[2] : N : skin, paper

kide : V.Cf : brew (beer, porage)

kin : V.Hb : pass on/by

kina : N : thus, (not) yet(4.5.3.6)

kinta :V.Cf: put down, found

kir : N : chief

kiri-baa^{3}: N : chiefdom

kiso : N : neighbour

ko^{1} : N : village, town, country

ko^{2}la^{2}..n^{3} :V.Cf + NP(IO): be roofed with

ko^{1}-laatu-la: Adj: person who lives far away

koo^{1} : N : cock

koo^{2} : SF : (question 31.4)

kor^{1} : N : hen, fowl

ku :V.Hb: reach, arrive

kuluguda: Adj : circular

kunta :V.Ae: bend over

kunkoon : N : knee

kwaay :Quant: all

kwiiye : N : dry season

kyaa : N : hawk, plane

L

-l : Sx : (6.3.1.3.3)

la^{1} : N : rain

la^{2} : Rr : up, on, over

laa^{1} : SF : (= raa)

laafi : N : health (Ha.)

laaka : N : question

l. da^{4}/dinda^{1}:N(O)+VP: ask

laar : N : woman, wife

laatu :V.Ed: be distant

lar :V.Cd: ask

-le^{1} : Sx : (non past:4.5.5)

le^{2} : N : mouth

le^{3} : Rr : towards

le^{4} : N : a number

-le^{5} : Sx : (= -l)

le^{2} ba^{2}...ma^{1}:N(S)+VP+NP(IO): dislike, not want

leda :V.Ed: excel, beat

lee^{1} : N : a leaf

lee^{2} : N : place, time

lee^{3} : N : first-place

l. ka :N(O)+VP: be first, be early

lee^{2} ku...o : N(O)+VP+NP(IO): arrive at

le^{4}sa^{3} :N(O)+VP: to count

le^{2} ta^{2}...ma^{1}:N(S)+VP+NP(IO): like, want

-li : Sx : (= -l)

liifu : N : holiday

lo^{1} : N : slave

lo^{2} :V.Cf: grind

lo^{3} :V.Cf: sing

lo^{4} :Adv : why, how?

lori : N : lorry, car(Eng)

lu : N : woman, wife

lu-ban : N : old woman

lunlo : Adv: why on earth?

luu[1] : N : lap, groin

M

m : Pn : (1st.sing.)

ma[1] : Rr : (various verb-related senses)

ma[2] : N : blood,pus,mucus

ma[3] :V.Ae: be ripe, ready

ma[5] :V.Cc: hear,understand

maa[2] : Adv : thus

maasile : N : delay

mani : N : libation to ancestors

masi : N : root (of plant)

mi[1] :V.Cf: drink

mii[3] : N : (= min[3])

mii[3] ba[1]: N()+VP: talk,converse

miin-yaa[1]: N : nose

mii[6]-yaa[1] : N : eye

min[1] : N : head

min[2] : N : horn

min[3] : N : word,business quarrel - "palaver"

min[4] : N : snake

min[5] : N : companion, mate

min[6] : N : eye

miŋa[1] :Ajnc: good

miŋa[2] : N : self

moo : Pn : (1st.sg. = m)

mor[1] : N : lumbar region

moto : N : motor byke (Eng.)

moy : N : rice

moy-sila: N : rice-field

mun[1] :V.Cf: swallow

mun[2] : N : moon, month

mun[3] : N : tail (of animal)

mun[2]-yaa[2]: N : star

N

-n[1] : Sx : (= -le[1])

n[2] : SF : (4.4.1)

n[3] : Rr : (cf. ma[1])

n[4] : SF : (negative)

n[5] : SF : (see 7.2.2)

n[6] : Pn : (3rd. pl.)

naa : Dem : this

naa-duu[4]: Dem : this-here

nàtiŋa[1] : N : village

nboon : Pn : (3rd. pl.)

neen : N : tongue

nka : N : who?

no[1] : N : belly, middle

noon[1] :Dem.pl.: those

noko :V.Ed: excel, beat

noon[1] : N : story

noon[2] ze[1] :N()+VP: dive in

NY

nya	:V.Gc:	finish, run out, use up.
nya...n^{3}	: VP+NP(IO):	come second
nyaso	:V.Cf:	catch, grasp
nyeesi	: N :	medicine, answer
nyi^{1}	: N :	child, young
nyii^{1}	: N :	ghost
nyii^{2} ba^{1}...n^{3}	:N(O)+VP+NP(IO):	be afraid of
nyii^{3} ka^{3}	:N(O)+VP:	weep
nyiika	:V.Ac:	faint
nyinbweere	: N:	girl
nyinta^{1}	:V.Ib:	sit,live, be
nyinta^{2}	:Ajnc:	sweet, nice
nyinta^{2}-baa^{3}	:N:	sweetness
nyinkiin	: N :	sleep
nyɔ	: N :	breast, milk
nyɔɔ^{1}	:V.Gc:	send
nyɔɔ^{2}	: Adj :	cold
nyɔɔn	: N :	fat, oil

ŋ

ŋwa^{1}	:V.Cf:	burn and spoil (food)
ŋwa^{2}	:V.Cf:	love
ŋwaari	: N :	a lie
ŋwan	: N :	a bull

Ɔ

ɔɔ	: Pn :	(1st. pl.)

O

o	: Rr :	in, at, on
oo	: SF :	or (5.5.1.1)

P

pa^{1}	:V.Cf:	fill, be full
pa^{2}	: Rr :	(cf. ma^{1})
paa^{3}	: Int :	very
pago	: N :	bark (of tree)
panni	: N :	thread
paŋa	: N :	strength
par	: N :	house, compound
par-nyi^{1}	: N :	fellow-member of household
par zaa^{2}	: N+N:	head of house
pawo	: N :	stubble
pe^{1}	: N :	calabash
pe^{2}	:V.Gc:	buy
pe^{3}	:V.Cf:	fan, winnow
pee	:V.Gc:	(= pe^{2})
peen	: N :	knife
peer	: N :	sourness
pi^{1}	: N :	water,liquid
pi^{2}	:V.Ib:	speak, say
piiya	: Num :	two
pipel	: N :	wind
piyen	:V.Rb:	taste fermenty
poyaa	: N :	iron
poo	: N :	bush, farm
poori/ pooli	:Ajnc:	little

poori-poori:Ajnc: tiny, carefully

-pra : Num : twen-, two(in compounds)

R

raa : SF : (question:3.1.4.1)

-re : Sx : diminutive

-ro : Sx : (plur.:8.2.4)

S

sa[1] : N : male(animal)

-sa[2] : Sx : diminutive

sa[3] :V.Cf: take

sara : N : game, party

sara-baa[3]: N : amusement

sawadago: N : cloud

se : N : fire

see : SF : (3.1.1.2)

si[1] : Num : four

si[2] :V.Lc: buy

si[3] :V.Gc: receive

si[4] :V.D[R]: run (also bri-/br'a-si)

si[5] : N : any (4.5.3.6)

si[6] ka[3]:N(O)+VP: to pant

si[7] : N : granary

si[8] : Adj : red

sii- : N : (= sisi)

sii-da[2] : N : mare

siin : SF : (3.2.2.4,d)

siili : N : early rainy-season

-sila : N : -farm

sin[1] : N : meat

sinkaan : N : groundnut/s

sinsa[1]/ sinsar :V.Cf: to sew

si[7]-pi[1] : N : large water-storage pot

sir : N : sheep

sisi : N : horse

so[1] : Adv : also, too

so[2] : N : tooth

sooda : N : conversation

soogya : N : soldier (Eng.)

soor : Num : five

sukur : N : school (Eng.)

sula :V.Ae: repeat, recur

sunsa : Adv : again

suu[1] : N : ashes, greyness

suu[2]...o:VP+NP(IO): rule over

T

ta[1] :V.F : walk, go

ta[2] :V.Kb: exist

ta[2]...n[3]:VP+NP(IO): have

taa[1] : N : sand

taa^{2} : Rr : under

tala^{1} : N : ground, floor

teedaka :V.Ce: think

ten : N : time

ti : SF : (= tri: Bk.)

to^{1} : N : name

to^{2} :V.F.: step (on/in)

to^{3}'w :V.Cf[R]: try

to^{4} :V.Cf: bend

to^{5} :V.Gc: pour

too : SF : O.K. (3.2.1)

tor : N : ear

tri : SF : (habitual: 4.5.6)

tuu^{1} :NN : a well

tuu^{2} :V.Ha: leave

tuu^{3} :Quant: all

tuu^{4} :V.Ca[R]: be distant

V

van^{1} :Ajnc: empty,worthless

van^{2} : Adj : other

vonnu : Adj : green(slime)

W

w :V.Ac: say

wala-kan-a-zi-ki:Num: 'millions'

wir^{1} : N : neck

wir^{2} :V.Bb: fly, leap

wo^{1} : N : hand, arm

woo : Pn : (1st. pl.)

wosi :V.Cf: cut through

wu^{1} :V.Cf: work(esp. farm)

wusa :V.Gc: grant (leave)

Wusu : N : God, sun

wuta :V.Cf: lie/lay down

wuti :V.Cf: rise/raise

wuu^{1} : N : millet 'porage'

wuu^{2} :V.J : divide

Y

y : SF : (7.2.2)

ya :V.Ca: to do again

yaa^{1} : N : hole

yaa^{2} : N : bone, seed,pip, individual item

yaa^{3} : N : place

yaada :V.Kc: greet

yalima : N : fool (Mo.)

ye^{1} : N : salt

ye^{2} :V.Ad: allow

ye^{3} :V.Gc: beg for

yi^{1} :V.Cf: see

yi^{2} :V.Cf: beget, bear, be born

yi^{3} : SF : (continuous - 4.5.6)

yi^{4} :V.Gc: receive.

yii-bo : N : yeast

yii-fir : N : yeastless (see Text AC,App.B)

y.r^{1} : N : red millet

yuusi : N : use (Eng.)

Z

zaa^{1}	: N :	road, path
zaa^{2}	: N :	owner, man-connected-with
zalga/ zarga	: N :	straw matting, thatch
zar^{4}	:V.C.f:	spoil, be spoilt
ze^{1}	:V.C.f:	hit, cut, kill
ze^{2}	:V.C.f:	scrape, skim
ze^{3}	:V.Bb:	come, return
ze^{3}...n^{3}	:VP+NP(IO):	bring
ze^{3}ko^{3}la^{2}	:VP+NP(IO):	come together
ze^{4}	: N :	death, funeral
zi^{1}	: N :	father
zi^{2} ba^{1}	:N(O)+VP:	to work
zi^{4}	: Rr :	towards
zi^{5}	: N :	last year
zi^{6}	: N :	'side', locality
zii-da^{6}	: N :	grandfather
zinze^{2} la^{2}	:V.C.f:	scrape foam off
zo^{1}	: N :	fish
zu^{1}	:V.C.f:	lose, throw away
zu^{2}	:V.F.:	follow

APPENDIX D

BISA DIALECTS:

A comparison of the Lebiri materials on which this study is based with Baraka samples in Prost, 1950 and Edmonson, 1963, yielded a list of features criterial in the distinction of Bisa dialects. A questionnaire was compiled incorporating these items in a set of 20 sentences which also exhibited a range of basic syntactic patterns. These Sentences were as follows:

1. I want to eat food.
2. You will go to market tomorrow.
3. Will you go to market tomorrow?
4. You will not go to market tomorrow.
5. He drank pito yesterday.
6. Did he drink pito yesterday?
7. He did not drink pito yeaterday.
8. What is this?
9. It is millet.
10. He is my friend.
11. You are outside.
12. You (pl.) are sleeping.
13. His girl-friend wandered about.
14. He sewed his shirt.
15. The wind is blowing
16. How much is the corn?
17. All these two men came.
18. The girl's nose.
19. My right eye.
20. My waist.

The questionnaire was used by an interview type of technique, asking the subject in English or French - orally - to translate the sentences one at a time into Bisa. Most of the 80 subjects - about equally distributed between Ghana and Upper Volta - were schoolboys with a reasonable grasp of the European language. This approach avoided any skewing through the researcher's use of any Bisa dialect; and also, by the use of younger subjects, avoided the possible mixture of dialects with more widely-travelled older men. About a quarter of the subjects were girls and sex seemed to make no difference to dialect at this level.

The responses were recorded, and from the transcripts 22 features were recognised as exhibiting dialectal variation - from two to five variants being recorded. These proved to be amenable to grouping into eight co-variant types which could be mapped as isoglosses on a map of the Bisa area[1]. Table 1 gives the items, numbered in the eight groups, with indication of which Questionnaire sentences contained each item. The map following the Table shows the isoglosses.

The items in the Table are based on Reading Transcription (p.72 above): 1a, 5 are phonological variations exhibited by many similar words.

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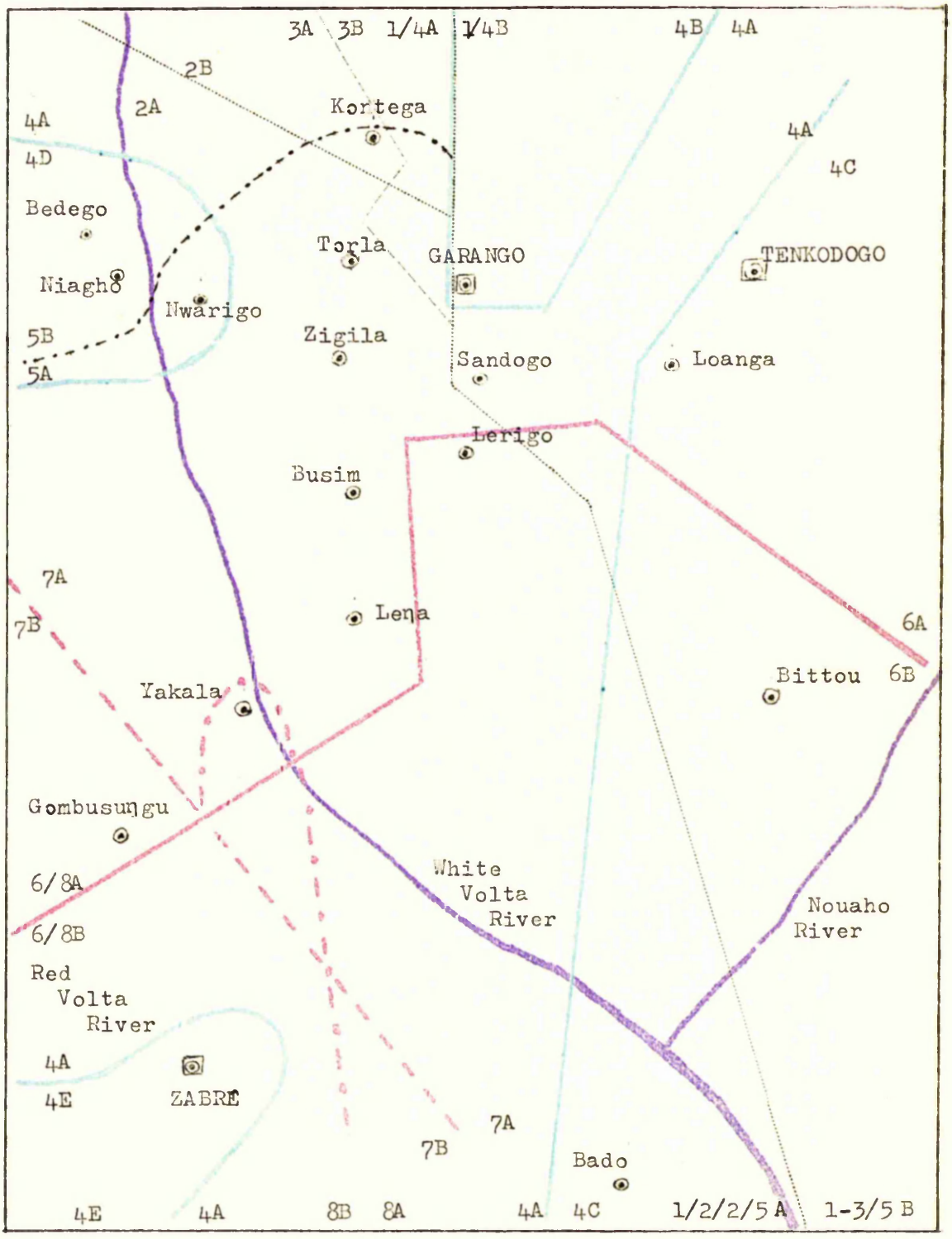
[1] For speakers at present resident in Ghana, the place of origin of their family - which all could give - was used in mapping.

TABLE 1 : DIALECT VARIANTS

No. (see map)	Translation	Sent. No.	Variant A	Variant B	Other Variants
	market	2-4	daasi	daki	
	tomorrow	2-4	booti	donle	
	come	17	bor	bu	
	pito (beer)	5-7	bee	ber	
	girl-friend	13	gyaan	laŋwo	
	man	17	gwaa	gor	
	nose	18	miinyaa	mii	
	right	19	bile	bisi	
	shirt	14	fuu	duma	(cf.5a,7a)
	corn	16	kanpaala	kamaana	(cf.8)
1 a	wander	13	{binbir / binbil}	bibil	
	sew	14	{sinsa / sinsal}	sisa / sisar	
2	you (sg.)	2-4, 11	ibii	iri	
	you (pl.)	12	abaa/awo	ara	
3	waist	20	mor	bud	
4	friend	10	gaasiba	haligari	C:zaa D:hanni E:gaasa
5	wind	15	pipel	hihel	(cf.7)
5 a	thing/shirt	1/14	fo/fuu	ho/huu	(cf.1,7a)
6	(non-past)	12,13,15	-n	-ma	
7	wind	15	pipel	waa	(cf.5)
7 a	shirt	14	fuu	duka	(cf.1,5a)
8	corn	16	kanpaala	maara	(cf.1)

MAP 2 : SKETCH-MAP OF DIALECTS



APPENDIX E

EXCLAMATIONS AND IDEOPHONES

The Exclamations and Ideophones are distinguished by a combination of syntactic specialisation and phonology outside the system which covers the rest of the material in the language. The Exclamations function at high Syntactic Ranks and are fairly adequately covered by the phonological comments in 1.5.1/2, pp. 65 ff. above, and by the syntactic discussion in 3.2.2 pp. 122 ff. . For practical purposes of analysis of the lower Ranks of the Syntax they can be omitted without interfering with the description.

The Ideophones need rather more comment. They have a number of characteristics which distinguish the Class, but no one, or combination, of these forms a necessary or sufficient condition for defining the Bisa Ideophone. Each of the criteria is shared with some other items in the language, it is rather the coincidence of a number of these in one item that constitutes it an Ideophone. The characteristics are :-

1) Presence of nasalised Vowel/s in the phonological structure (also in Exclamations): e.g. /fom/ - "pooh !"

2) Possibility of lengthening Vowels and Nasals, especially finally (transcribed with double Nasal letter or triple Vowel) : e.g. /pinn/ - "early", /teee/ - "long time".

3) Possibility of indefinite number of repetitions (this is usually an alternative to 2) above): e.g.

/ a n a ta ma tigi tigi tigi tigi tigi tigi tigi tigi tigi tigi / - AU030 - " and followed pitter-patter..."

- a simple repetition is found with other Classes in Doubled Stem formation (p. 218) and a triple occurrence of /kwaay/ can result from Quantifier Word-Expression structure (p.196).

4) Functions solely as Head of the Adverbial Phrase - p.191 ff. - a function shared with the Adverb Word. The other criteria distinguish these two Classes.

5) The Ideophones have a special semantic link with the main Verb of their Clause - and are thus only distinguished from Class B Adverb Words (p. 209 f.) by the phonology of the Ideophone.

6) The Ideophone has no analysable structure: given the ill-formedness of Bisa Word Rank[1] this is not very distinctive as there are a majority of unanalysable Words entering into Phrase structure.

There results from these criteria a Class somewhat different from the 'Ideophone' classes sometimes set up for African languages. Doubled items and Adjectival, Adjunctival and Adverbial Words of specialised collocation seem to be adequately handled in the ordinary Word Rank analysis unless they also show the phonological peculiarities mentioned above. The Ideophone Class resembles, as the glosses used in examples in the body of the description suggest, the onomatopœic "thud"s, "zot"s, "bam"s and the like which enliven our comic books, except that the Bisa items blend more readily into continuous speech and collocate with and reinforce the normal Verbs (occasionally Adjunctives or Adverbs).

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1 See p. 215.

ABBREVIATIONS AND TECHNICAL TERMS

[ ] in phonology - phonetic data
in formula - layer of analysis

/ / - phonemic transcription: p.69

( ) - in formula - Element: p.48
Morphemic Transcription: 70

⟨ ⟩ - Reading Transcription: p.73

// - in phonology, Nasal archiphoneme: 63
- in systemic diagram, non-occurrent combination: 52

+ , ± , ∓ - in formulæ : 48

{ } - in formulæ : 48

⌐¬ - in formulæ - alternative order: 48

}, {, [- in systemic diagram: 52 f.

\- - bound Morpheme: 49, 242

- zero Pronoun: 252

A - Adverbial
Adj - Adjective
Adjnc - Adjunctive (P)
ADJNCT - Adjunct: 134
Ajnc - Adjunctive (W)
Adv - Adverb (W)
ANTECD - Antecedent: 104
ANTITHS - Antithesis: 102
AP - Adverbial Phrase
Aux. - Auxiliary: 107 ff.

Bok. - Bokale (Cl.): 103
Bs. - Base : 231

C - Consonant
C.H. - Constructional Homonymity: 53
Cl. - Clause: Ch.4
Class : 24, 29 ff.
COM(M) - Comment: 135 ff.
COMP - Complement 142
COMPT - Complementive: 142
Construct: 46
Constructional Homonymity: 53
Coord - Coordinate: 153 ff.
Corpus : 55
Cpd. - Compound: 216
Cstr - Construct

Dbl - Doubled: 218
DEG - Degree: 191
Delicacy : 24
Dem - Demonstrative
DENOM - Denominator: 223
Derivation : 50
DESC - Descriptive: 175 ff.

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